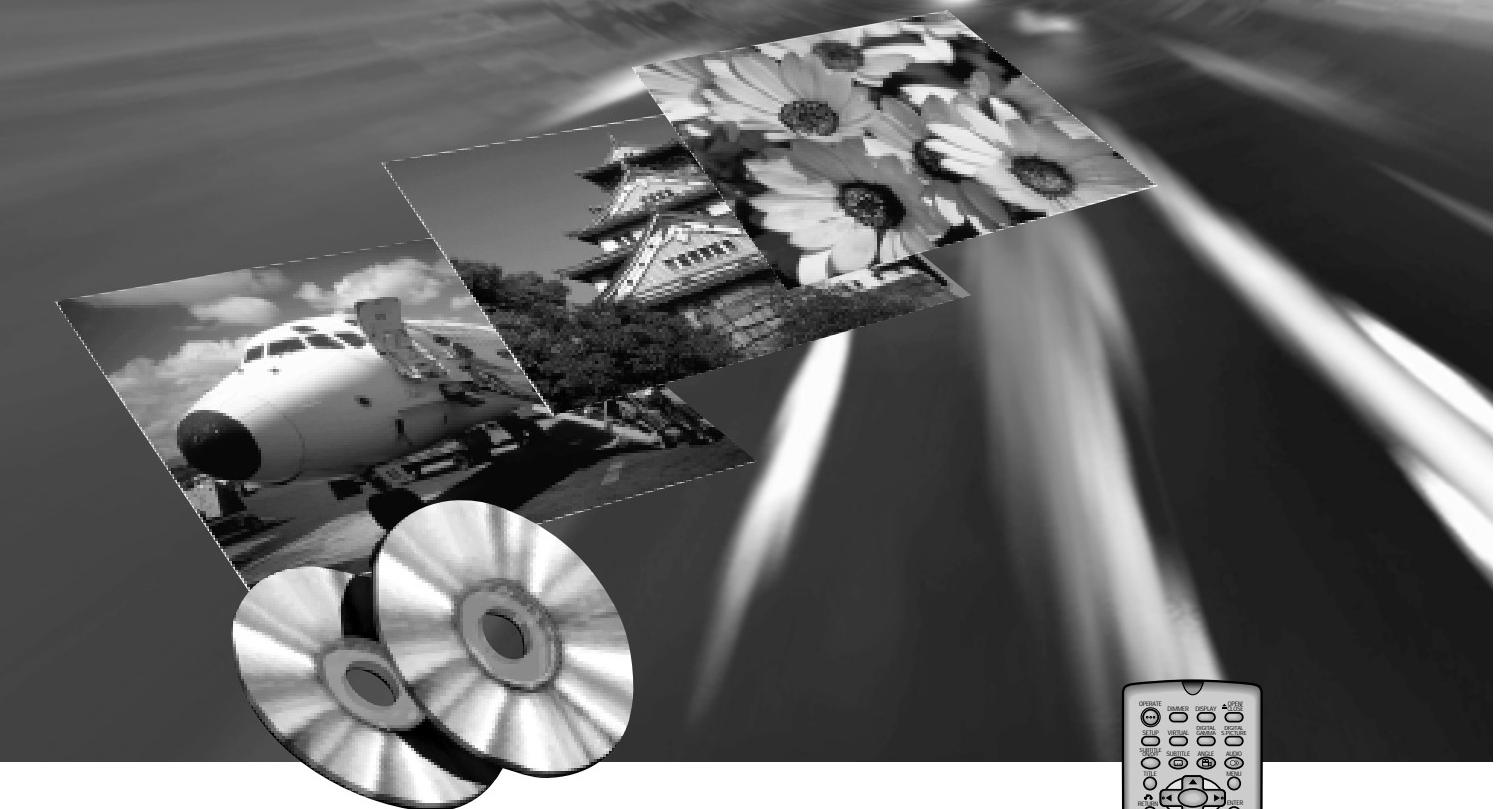


SHARP®

MODEL
DV-760H
DVD Video Player
OPERATION MANUAL



NTSC/PAL



This equipment complies with the requirements of Directives 89/336/EEC and 73/23/EEC as amended by 93/68/EEC.

Dieses Gerät entspricht den Anforderungen der EG-Richtlinien 89/336/EWG und 73/23/EWG mit Änderung 93/68/EWG.

Ce matériel répond aux exigences contenues dans les directives 89/336/CEE et 73/23/CEE modifiées par la directive 93/68/CEE.

Dit apparaat voldoet aan de eisen van de richtlijnen 89/336/EEG en 73/23/EEG, gewijzigd door 93/68/EEG.

Dette udstyr overholder kravene i direktiv nr. 89/336/EEC og 73/23/EEC med tillæg nr. 93/68/EEC.

Quest' apparecchio è conforme ai requisiti delle direttive 89/336/EEC e 73/23/EEC, come emendata dalla direttiva 93/68/EEC.

Η εγκατάσταση αυτή ανταποκρίνεται στις απαιτήσεις των οδηγιών της Ευρωπαϊκής Ένωσης 89/336/EOK και 73/23/EOK, όπως οι κανονισμοί αυτοί συμπληρώθηκαν από την οδηγία 93/68/EOK.

Este equipamento obedece às exigências das directivas 89/336/CEE e 73/23/CEE, na sua versão corrigida pela directiva 93/68/CEE.

Este aparato satisface las exigencias de las Directivas 89/336/CEE y 73/23/CEE, modificadas por medio de la 93/68/CEE.

Denna utrustning uppfyller kraven enligt riktlinjerna 89/336/EEC och 73/23/EEC så som kompletteras av 93/68/EEC.

Dette produktet oppfyller betingelsene i direktivene 89/336/EEC og 73/23/EEC i endringen 93/68/EEC.

Tämä laite täyttää direktiivien 89/336/EEC ja 73/23/EEC vaatimukset, joita on muutettu direktiivillä 93/68/EEC.

SPECIAL NOTE FOR USERS IN THE U.K.

The mains lead of this product is fitted with a non-rewireable (moulded) plug incorporating a 3A fuse. Should the fuse need to be replaced, a BSI or ASTA approved BS 1362 fuse marked  or  and of the same rating as above, which is also indicated on the pin face of the plug, must be used. Always refit the fuse cover after replacing the fuse. Never use the plug without the fuse cover fitted. In the unlikely event of the socket outlet in your home not being compatible with the plug supplied, cut-off the mains plug and fit an appropriate type.

DANGER: The fuse from the cut-off plug should be removed and the cut-off plug destroyed immediately and disposed of in a safe manner.

Under no circumstances should the cut-off plug be inserted elsewhere into a 13A socket outlet, as a serious electric shock may occur.

To fit an appropriate plug to the mains lead, follow the instructions below:

IMPORTANT: The wires in the mains lead are coloured in accordance with the following code:

Blue: Neutral

Brown: Live

As the colours of the wires in the mains lead of this product may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

- The wire which is coloured blue must be connected to the plug terminal which is marked N or coloured black.
- The wire which is coloured brown must be connected to the plug terminal which is marked L or coloured red.

Ensure that neither the brown nor the blue wire is connected to the earth terminal in your three-pin plug.

Before replacing the plug cover make sure that:

- If the new fitted plug contains a fuse, its value is the same as that removed from the cut-off plug.
- The lead grip is clamped over the sheath of the mains lead and not simply over the lead wires.

IF YOU HAVE ANY DOUBT, CONSULT A QUALIFIED ELECTRICIAN.

Contents



GENERAL INFORMATION

IMPORTANT SAFEGUARDS AND PRECAUTIONS	3
Features	5
Accessories	5
Types of Disc that can be played on Your DVD Player	6
Discs recorded by PAL system, Discs recorded by NTSC system and Type of TV connection	8
Main Unit of Your DVD Player	9
• Front	9
• Front Panel Display	9
• Rear	10
Remote Control Unit of Your DVD Player..	11
• DIMMER feature	11
• Inserting the Batteries	11
• Using the Remote Control for TV Operation	12



SETTING UP

Basic Connection	13
Optional Audio Connection	14
Turning on the TV and the DVD Player	16
Setup	17
• When turning on your DVD player for the first time after purchasing it	17
• TV MODE SET Setting	18
• SPEAKER Setting	20
• PARENTAL Level Setting	21
• PRO LOGIC Setting	22
• OSD (On Screen Display) LANGUAGE SETUP Setting	23
• DISC MENU LANGUAGE Setting	24
TEMPORARY PARENTAL Level Setting	26
Display Information	27
• No Disc Indicator	27
• Disc Error Indicator	27
• Region (Locale) Number Error Indicator	27
• Parental Level Error Indicator	27
• Operation Mode Indicators	28



BASIC OPERATIONS

DVD Playback	29
• Basic Play	29
• Still Picture	30
• Frame Advance	31
• Slow-Motion Play	31
• Resume Function	31

• Fast Forward	32
• Fast Reverse	32
• Skip (Forward)	33
• Skip (Reverse)	33

VCD (Video CD) and CD (Audio CD) Playback	34
• Fast Forward	35
• Fast Reverse	35
• Skip (Forward)	36
• Skip (Reverse)	36



SPECIAL FUNCTIONS

Continuing Playback from where you stopped (Continued Playback)	37
Using Headphone	37
Direct Selection of Scenes	38
• Selecting Scenes by Title Number (DVD)	38
• Moving from the Menu Screen to the Titles/Changing the Menu Language (DVD)	38
• Direct Skip Function (DVD) (VCD, CD)	39
Programmed Playback	41
• Title Programmed Playback (DVD)	41
• Chapter Programmed Playback (DVD)	42
• Track Programmed Playback (VCD, CD)	43
Repeat Playback.....	44
• Chapter Repeat (DVD)	44
• Title Repeat (DVD)	44
• A-B Repeat (DVD)	45
• Disc Repeat (VCD, CD)	46
Angle Selection (DVD only)	47
Subtitle Selection (DVD only)	48
Audio Selection	49
• DVD Discs	49
• Video CDs and Audio CDs	49
New Digital Gamma Selection (DVD, VCD)	50
New Digital Super Picture Selection (DVD, VCD)	51
VIRTUAL Surround (Audio) Selection (DVD only)	52



OTHERS

Language Code List on Menu Screen	53
Definition of Terms	54
Specifications	55
Before Calling Service	56
Disc Handling and Maintenance	57



IMPORTANT SAFEGUARDS AND PRECAUTIONS

CAUTION

BEFORE OPERATING YOUR NEW DVD PLAYER, PLEASE READ THIS OPERATION MANUAL CAREFULLY. THE MANUAL SHOULD THEN BE STORED FOR FUTURE REFERENCE IN CASE OF OPERATING DIFFICULTIES OR FUNCTIONAL DESCRIPTIONS.

Note:

This unit can be used only where the power supply is AC 220V-240V, 50/60Hz. It cannot be used elsewhere.

CAUTION:

USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

AS THE LASER BEAM USED IN THIS DVD PLAYER IS HARMFUL TO THE EYES, DO NOT ATTEMPT TO DISASSEMBLE THE CABINET. REFER SERVICING TO QUALIFIED PERSONNEL ONLY.

WARNING:

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, AND ANNOYING INTERFERENCE, USE THE RECOMMENDED ACCESSORIES ONLY.

Laser Diode Properties

Material: AlGaNp

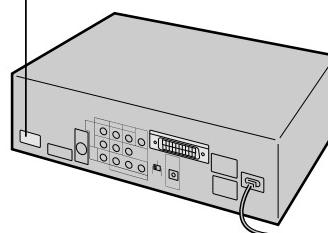
Wave length: 650 nm

Emission Duration: Continuous

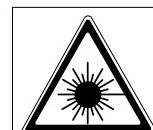
Laser output: Max. 0.7 mW

- This DVD player is classified as a CLASS 1 LASER product.
- The CLASS 1 LASER PRODUCT label is located on the rear cover.
- This product contains a low power laser device. To ensure continued safety do not remove any cover or attempt to gain access to the inside of the product. Refer all servicing to qualified personnel.

**CLASS 1
LASER PRODUCT**



(Rear of product)



CAUTION-WHEN OPEN. DO NOT STARE INTO BEAM OR VIEW DIRECTLY WITH OPTICAL INSTRUMENTS.

VARNING-NÄR DENNA DEL ÄR ÖPPNAD. STIRRA EJ IN I STRÅLEN OCH BETRAKTA EJ STRÅLEN MED OPTISKA INSTRUMENT.

ADVARSEL-VED ÅBNING. SE IKKE IND I STRÅLEN-HELLER IKKE MED OPTISKE INSTRUMENTER.

VARO! AVATTAESSA OLET ALTTINA. ÄLÄ TULJOTA SÄTEESEEN ALAKÄ KATSO SITÄ OPTISEN LAITTEEN LÄPI

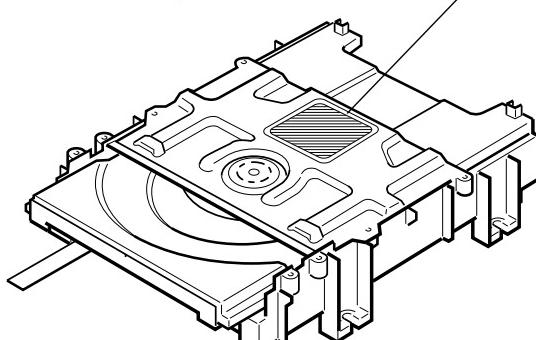
WARNING-NÄR DENNA DEL ÄR ÖPPNAD. STIRRA EJ IN I STRÅLEN OCH BETRAKTA EJ STRÅLEN GENOM OPTISK INSTRUMENT.

ADVARSEL-NÄR DEKSEL ÅPNES. STIRR INN I STRÅLEN ELLER SE DIREKTE MED OPTISKE INSTRUMENTER.

ここを開くとレーザー光が出ます。

レーザー光をのぞき込まないでください。

光学機器で直接ビームを見ないでください。



GENERAL INFORMATION

SETTING UP

BASIC OPERATIONS

SPECIAL FUNCTIONS

OTHERS



IMPORTANT SAFEGUARDS AND PRECAUTIONS

Power Lead Protection

To avoid any malfunctions of the unit, and to protect against electric shock, fire or personal injury, please observe the following.

- Hold the plug firmly when connecting or disconnecting the AC power lead.
- Keep the AC power lead away from heating appliances.
- Never put any heavy object on the AC power lead.
- Do not attempt to repair or reconstruct the AC power lead in any way.

Location and Handling

- Air vents are provided in the DVD player cabinet to prevent excessive temperatures inside the unit. Do not place your DVD player in enclosed spaces, cover it, or otherwise block the vents.
- Do not place the DVD player in direct sunlight, or near heat sources.
- Keep the DVD player away from strong magnetic fields, i.e. loudspeakers etc.
- Do not insert or drop anything into the DVD player through the air vents as this could cause serious damage, possibly resulting in fire.
- Do not place any object containing water or other liquids on the DVD player. In the event that liquid should enter the cabinet, unplug the DVD player immediately and contact the retailer or service centre approved by Sharp immediately.
- Do not remove the DVD player cabinet. Touching parts inside the cabinet could result in electric shock and/or damage to the DVD player. For service and adjustment inside the cabinet, call a qualified dealer or service centre approved by Sharp.

Periods of no use

When the unit is not being used, switch the unit to the standby mode.

When left unused for a long period of time, the unit should be unplugged from the household AC outlet.

No Fingers or Other Objects Inside

Do not put any foreign object on the disc tray.

Stacking

Place the unit in a horizontal position, and do not place anything heavy on it.

Condensation

Moisture may form on the pickup lens in the following conditions:

- immediately after a heater has been turned on.
- in a steamy or very humid room.
- when the unit is suddenly moved from a cold environment to a warm one.

If moisture forms inside this unit, it may not operate properly.

In this case, turn on the power and wait about one hour for the moisture to evaporate.

If There is Noise Interference on the TV While a Broadcast is being Received

Depending on the reception condition of the TV, interference may appear on the TV monitor while you watch a TV broadcast and the unit is left on. This is not a malfunction of the unit or the TV. To watch a TV broadcast, turn off the unit.

Service

Do not attempt to service this DVD player yourself. Please refer any service to the nearest service centre approved by Sharp.

Copyright

Recording and playback of any material may require consent.

Please refer particularly to the provisions of the Copyright Act 1956, the Dramatic and Musical Performers Protection Act 1958, the Performers Protection Acts 1963 and 1972 and to any subsequent statutory enactments and orders.

Copy Protection

This DVD player supports Macrovision copy protection. On DVD discs that include a copy protection code, if the contents of the DVD disc are copied using a VCR, the copy protection code prevents the videotape copy from playing normally.

Apparatus Claims of U.S. Patent Nos. 4,631,603, 4,577,216, 4,819,098 and 4,907,093 licensed for limited viewing uses only.

This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.

Recommended Measures for Optimum Picture Excellence

The unit is a precision device that is constructed using extremely accurate technology. Soiling or friction affecting the pickup lens or disc drive can impair the image quality. In the worst case, neither video or audio will be played back. To obtain optimum picture quality, the player should be checked (cleaning and replacement of some parts) every 1,000 hours. Note that this period varies depending on the environment (temperature, humidity, dust, etc.) in which the player is used. Contact your authorized Sharp supplier for details.

Do not attempt to clean the pickup lens yourself.

Features

- Plays DVD, video CD and CD (Digital Audio) discs
- Built-in Dolby Digital decoder supporting Dolby Pro Logic^{*1} decoding and Virtual Surround
- MPEG Audio Version 2.0 multi channel (5.1ch) DVD discs can be played back.
- New Digital Gamma correction and New Digital Super Picture functions
- Separate colour component output connectors (Y, Pb(Cb) and Pr(Cr))/RGB OUT/S-VIDEO OUT
- DTS^{*2} AUDIO DECODER (DIGITAL THEATRE SYSTEM)

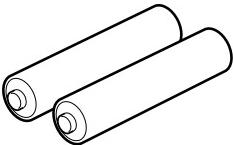
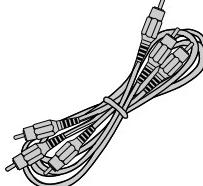
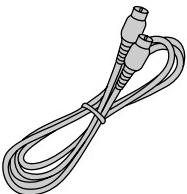
^{*1} Manufactured under license from Dolby Laboratories. "Dolby", "Pro Logic" and the double-D symbol are trademarks of Dolby Laboratories. Confidential Unpublished Works. ©1992-1997 Dolby Laboratories, Inc. All rights reserved.

^{*2} "DTS" and "DTS Digital Surround" are trademarks of Digital Theater Systems, Inc.

Disc Features and this Operation Manual

- The types of functions and operations that can be used for a particular disc vary depending on the features of that disc. In some cases, these functions and operations may differ from the descriptions given in this Operation Manual. In this event, follow the instructions given on the screen. This Operation Manual only covers basic disc operations.
- **For some operations, the  icon may appear on the screen. This indicates that the operation described in this Operation Manual is not permitted for the current disc.**

Accessories

 Remote control unit	 Two R6 (UM/SUM-3 or AA) batteries for the remote control unit	 Video/audio lead
 S-video lead		



Types of Disc that can be played on Your DVD Player

The unit can play back discs bearing any of the following marks:

	DVD [8 cm disc/12 cm disc]	See NOTE 1 See NOTE 2 (see next page) See NOTE 3 (see next page)
	Video CDs [8 cm disc/12 cm disc]	See NOTE 2 (see next page) • Supports version until version 2.0.
	Audio CDs [8 cm disc/12 cm disc]	
Other CDs		
1) On CD-G and CD-EXTRA discs, only the sound can be played (no images). 2) Photo CD, DVD-ROM and CD-ROM discs cannot be used. 3) Discs with unusual shapes (heart-shaped or hexagonal discs) cannot be used. The use of such discs will cause a fault. • When the player detects an Incompatible disc, it ejects the disc tray. When this happens, check the disc type.		

NOTE 1

- DVD players and discs are designed with region numbers which dictate the regions in which a disc can be played. If the region number on the disc you want to play does not match the region number in your DVD player, you will not be able to play the disc.

The region number for this DVD player is 2.

Sample disc display:



Disc playable in all regions

The list below shows the countries covered by region number **2**.

Common Names	Names of Nations and Areas	Common Names	Names of Nations and Areas
Albania	Republic of Albania	Malta	Republic of Malta
Andorra	Principality of Andorra	Monaco	Principality of Monaco
Austria	Republic of Austria	Netherlands	Kingdom of the Netherlands
Bahrain	State of Bahrain	Norway	Kingdom of Norway
Belgium	Kingdom of Belgium	Oman	Sultanate of Oman
Bosnia and Herzegovina	Bosnia and Herzegovina	Poland	Republic of Poland
Bulgaria	Republic of Bulgaria	Portugal	Portuguese Republic
Croatia	Republic of Croatia	Qatar	State of Qatar
Cyprus	Republic of Cyprus	Romania	Romania
Czech	The Czech Republic	San Marino	Republic of San Marino
Denmark	Kingdom of Denmark	Saudi Arabia	Kingdom of Saudi Arabia
Egypt	Arab Republic of Egypt	Slovakia	The Slovak Republic
Finland	Republic of Finland	Slovenia	Republic of Slovenia
France	French Republic	South Africa	Republic of South Africa
Germany	Federal Republic of Germany	Spain	Spain
Greece	Hellenic Republic	Swaziland	Kingdom of Swaziland
Hungary	Republic of Hungary	Sweden	Kingdom of Sweden
Iceland	Republic of Iceland	Switzerland	Swiss Confederation
Iran	Islamic Republic of Iran	Syrian Arab Republic	Syrian Arab Republic
Iraq	Republic of Iraq	Turkey	Republic of Turkey
Ireland	Ireland	United Arab Emirates	United Arab Emirates
Israel	State of Israel	United Kingdom	United Kingdom of Great Britain and Northern Ireland
Italy	Republic of Italy	Vatican City State	State of the City of Vatican
Japan	Japan	Yemen	Republic of Yemen
Jordan	Hashemite Kingdom of Jordan	Yugoslavia	Federal Republic of Yugoslavia
Kuwait	State of Kuwait	Channel Islands*	Channel Islands
Lebanon	Republic of Lebanon	Faeroe Islands*	Faeroe Islands
Lesotho	Kingdom of Lesotho	Gibraltar*	Gibraltar
Liechtenstein	Principality of Liechtenstein	Greenland*	Greenland
Luxembourg	Grand Duchy of Luxembourg	Isle of Man*	Isle of Man
Macedonia	The Former Yugoslav Republic of Macedonia	Svalbard and Jan Mayen Islands*	Svalbard and Jan Mayen Islands



Types of Disc that can be played on Your DVD Player

NOTE ➤ 2

- The specific playback functionality for some DVD and video CD discs is determined by the disc manufacturer. Because this DVD player plays disc data in accordance with the disc manufacturer's guidelines, some functions may not be available on some discs. Be sure to read the instructions provided with the disc.

The “Prohibited” icon displayed during DVD player operation indicates that manufacturer-imposed restrictions apply.

NOTE ➤ 3

- This player supports the 2-channel (L/R) audio and 5.1-channel (Multi-channel) in MPEG Version 2.0 Audio.
- However, it does not support 7.1-channel in MPEG Version 2.0 Audio.

Discs that Cannot be Played

1. You cannot play illegally produced discs.

- You cannot play discs of other region number than No. 2 (refer to the list of region number 2 on page 6), such as discs for the use in U.S.A. (region No. 1) and China (region No. 6).

2. You cannot play scratched discs.

3. You cannot play discs that are dusty, soiled or marked with fingerprints.

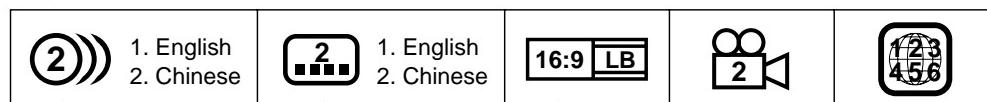
- If the playing surface of a disc is soiled or scratched, the player may decide that the disc is incompatible and eject the disc tray, or it may fail to play the disc correctly.

(Refer to the Instructions on page 57 and clean discs before attempting to play them.)

While a disc is playing, soiling or scratches on the disc may disrupt the image (appearing as blocks on the screen). When the image is disrupted, the player automatically restores the correct image after 2 or 3 seconds. If the normal screen does not reappear, press the **RESUME** button on the remote control. This will bring up the normal screen again.

Icons used on DVD discs

Sample Icons



Number of audio tracks

Type of subtitles recorded

Screen aspect ratio recorded

Disc with multiple camera angles

Region code indicator (see page 6)

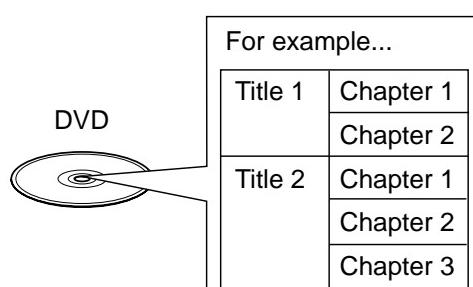
Glossary of Disc Terms

Title (DVD)

For instance, the movies on a disc that contains two movies can be numbered title 1 and title 2.

Chapter (DVD)

A further subdivision within a title.



Track (video or audio CD)

For instance, the songs on a disc that contains five songs can be numbered tracks 1, 2, 3, 4 and 5.

Video/audio CD

For example...



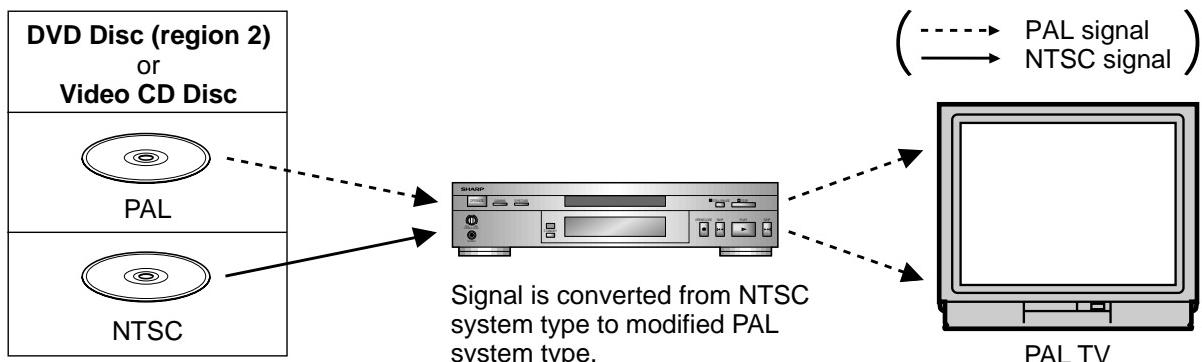
Track 1	Track 2	Track 3	Track 4	Track 5
---------	---------	---------	---------	---------



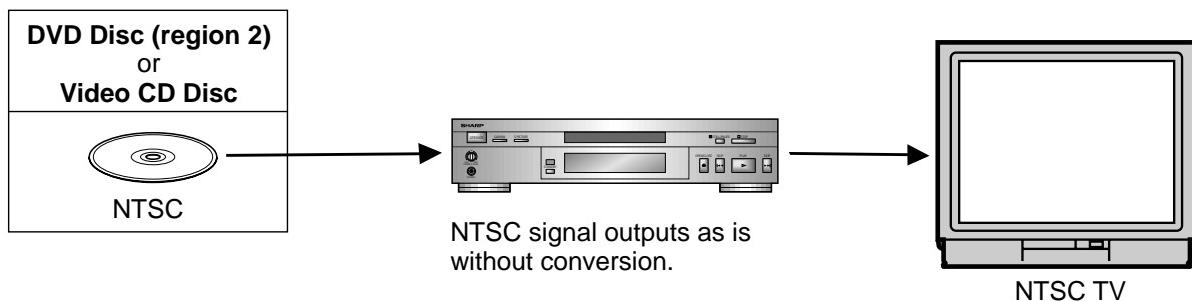
Discs recorded by PAL system, Discs recorded by NTSC system and Type of TV connection

- The DVD player can play back discs recorded by NTSC using the modified PAL system, such as Video CD, DVD-region 2, but cannot play back discs for the use in U.S.A. (region No. 1).
- Region numbers cannot be changed in this system.
- This DVD player also has a built-in system converter which makes it possible to view discs (Video CD, DVD-region 2) recorded by the NTSC system using a PAL TV. (See "NTSC Disc Play Back on a PAL TV" below.)
- For selecting NTSC→PAL or NTSC, refer to "TV MODE SET setting" on page 18.

<When selecting NTSC→PAL>

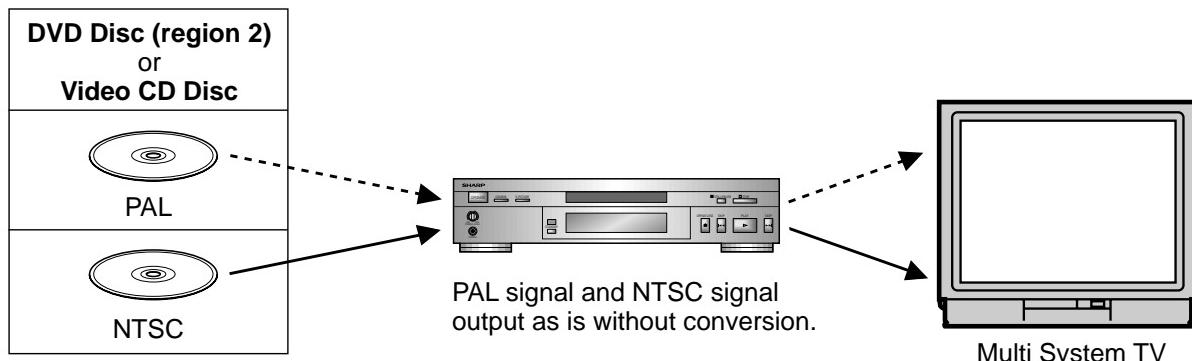


<When selecting NTSC>



- When connecting this DVD player with a Multi System TV, it is possible to select and set NTSC on the NTSC line of TV MODE SET on the SET UP screen during initial setting.

<When selecting NTSC>



NTSC Disc Play Back on a PAL TV

When playing an NTSC disc with "NTSC→PAL" selected in TV MODE SET on the DVD player using a PAL TV, please note the following:

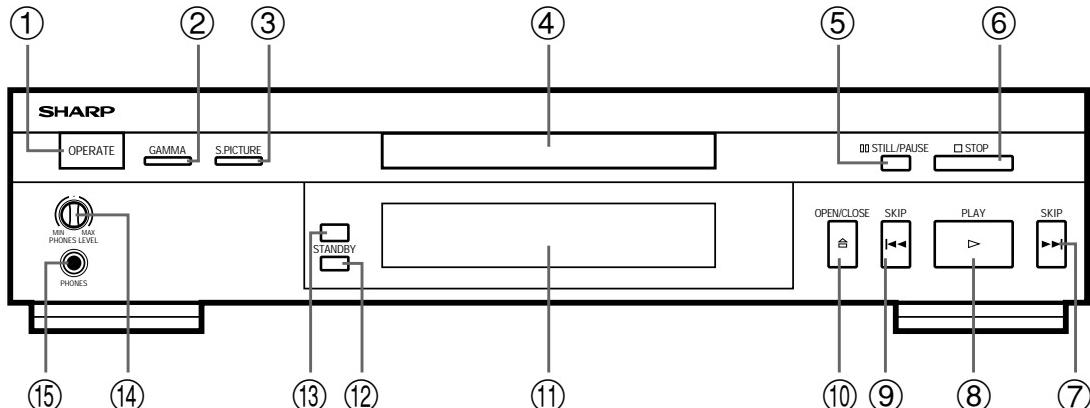
- The picture will shrink vertically to some degree, as shown in the diagram, but this does not indicate a malfunction in your TV or DVD Player.
- If your TV does not have a V-HOLD control, the picture may roll and be unwatchable. However, if you use a TV with V-HOLD control, you can stop the rolling by adjusting the V-HOLD control and watch the picture.





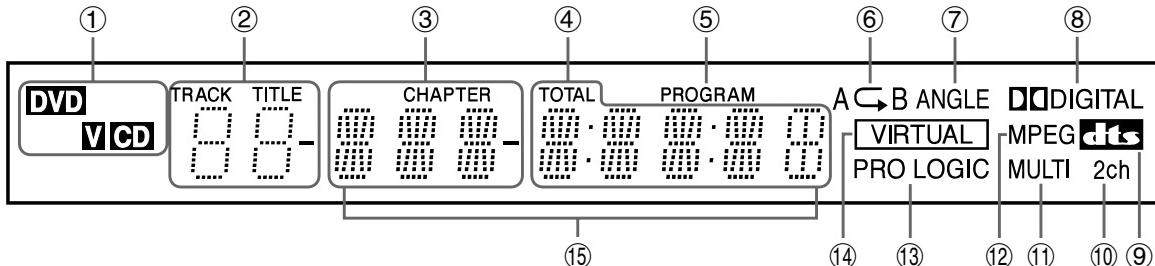
Main Unit of Your DVD Player

Front



- | | |
|---|---|
| ① OPERATE button
(see page 16) | ⑥ STOP (□) button (see page 29) |
| ② GAMMA button/LED indicator
(see page 50) | ⑦ SKIP Forward (▶▶) button
(see page 33) |
| ③ S.PICTURE button/LED indicator
(see page 51) | ⑧ PLAY (▷) button (see page 29) |
| ④ DISC tray (see page 29) | ⑨ SKIP Reverse (◀◀) button
(see page 33) |
| ⑤ STILL/PAUSE (■■) button
(see page 30) | ⑩ OPEN/CLOSE (△) button for tray
(see page 29) |
| | ⑪ Front panel display (see below) |
| | ⑫ STANDBY LED indicator
(see page 16)
When the unit is connected to the AC main supply, this indicator lights up in standby mode and goes out when the unit is turned on. |
| | ⑬ Remote Control receptor |
| | ⑭ PHONES LEVEL knob
(see page 37) |
| | ⑮ PHONES jack (see page 37) |

Front Panel Display



The figure above shows the front panel with all the displays on.

- | | |
|--|---------------------------------------|
| ① Lights when a DVD is loaded | ⑧ Dolby Digital indicator |
| Lights when an audio CD is loaded | ⑨ "dts" indicator |
| Lights when a Video CD is loaded | ⑩ "2ch" indicator |
| ② Shows the title number [DVD only]/Shows the track number [Video CD and Audio CD] | ⑪ "MULTI" indicator |
| ③ Shows the chapter number [DVD only] | ⑫ "MPEG" indicator |
| ④ Shows the total time elapsed since the disc started playing. | ⑬ PRO LOGIC indicator |
| ⑤ PROGRAM indicator | ⑭ Virtual Surround indicator |
| Lights during PROGRAM play. | ⑮ Operating mode indicator (Messages) |
| ⑥ Lights during repeat play |
<Display examples> |
| C : Repeat A C B: A-B repeat | NO DISC PLAY PAUSE |
| ⑦ Lights when it is possible to switch the angle. | OPEN FWD CLOSE |
| [DVD only] (See page 47) | LOAD REV SLOW |
| | STOP STILL PBC |



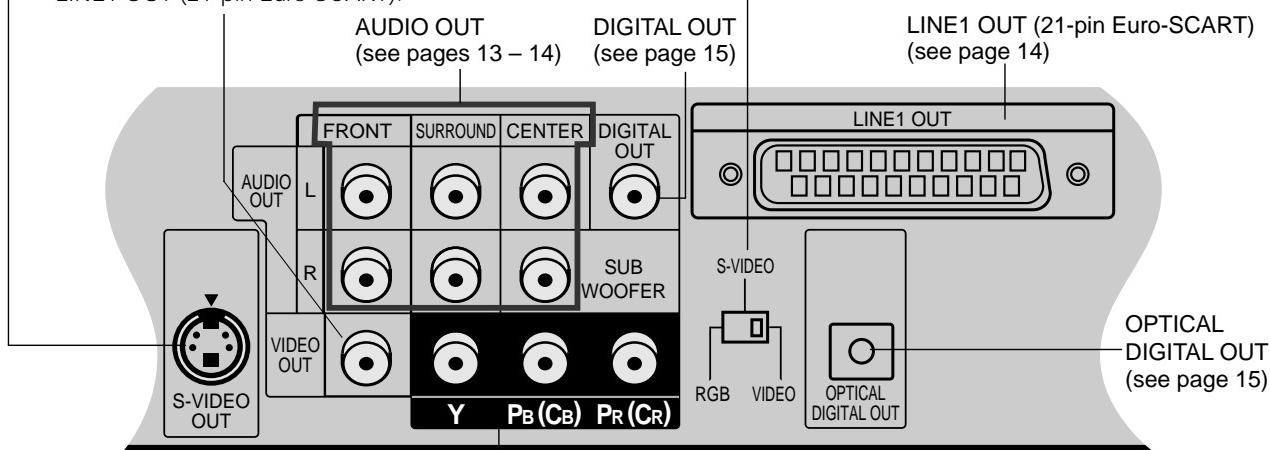
Rear

S-VIDEO OUT

- S-VIDEO signal is always output regardless of the position of the output mode changeover switch for LINE1 OUT (21-pin Euro-SCART).

VIDEO OUT

- VIDEO signal is always output regardless of the position of the output mode changeover switch for LINE1 OUT (21-pin Euro-SCART).



Colour Output Connectors (Y, Pb(Cb) and Pr(Cr)):

Some TVs and monitors are equipped with input connectors for the component colour signals (Y, Pb(Cb) and Pr(Cr)). By connecting these input connectors to the corresponding output connectors on the DVD player, you can enjoy higher quality playback images.

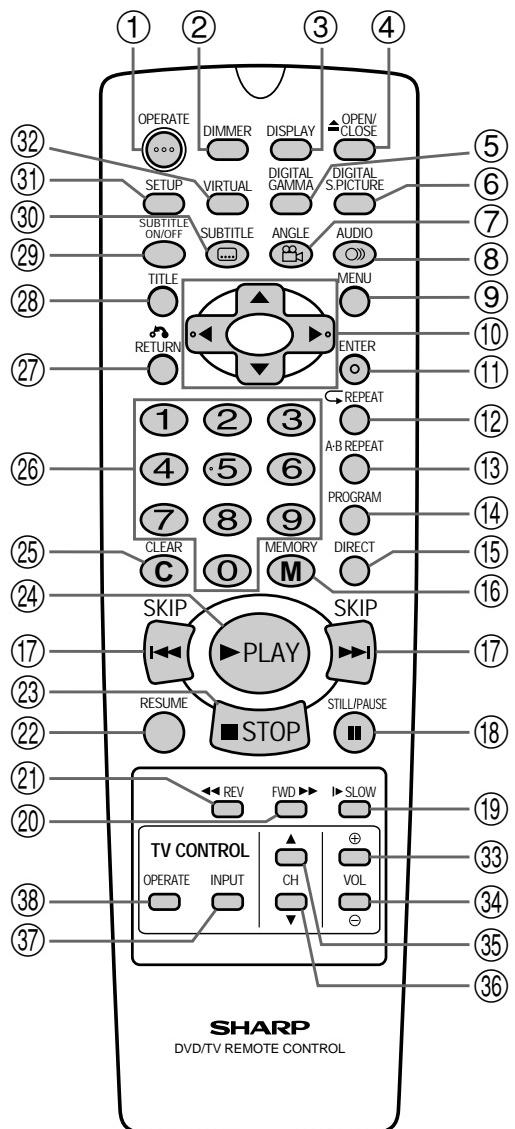
If you are using a TV or monitor equipped with Y, Pb(Cb) and Pr(Cr) connectors, use these connectors rather than the VIDEO OUT or S-VIDEO OUT connector.

NOTE

When the output changeover switch of LINE1 OUT (21-pin Euro-SCART) is set in "RGB" position, component colour signals (Y, Pb(Cb), Pr(Cr)) are not output.



Remote Control Unit of Your DVD Player



- ① OPERATE button (see page 16)
 * ② DIMMER button (see below)
 ③ DISPLAY (OSD) button (see page 28)
 ④ OPEN/CLOSE (Δ) button (see page 29)
 ⑤ DIGITAL GAMMA button (see page 50)
 ⑥ DIGITAL S.PICTURE button (see page 51)
 ⑦ ANGLE (\square) button (see page 47)
 ⑧ AUDIO (\circ) button (see page 49)
 ⑨ MENU button (see page 29)
 ⑩ Δ/∇ , $\blacktriangleleft/\blacktriangleright$ buttons (see page 17)
 ⑪ ENTER button (see page 17)
 ⑫ REPEAT (\subset) button (see page 44)
 ⑬ A-B REPEAT button (see page 45)
 ⑭ PROGRAM button (see page 41)
 ⑮ DIRECT button (see page 39)
 ⑯ MEMORY (M) button (see page 30)
 ⑰ SKIP ($\blacktriangleleft/\blacktriangleright$) buttons (Reverse/Forward) (see page 33)
 ⑱ STILL/PAUSE (II) button (see page 30)
 ⑲ SLOW (I \blacktriangleright) button (see page 31)
 ⑳ FWD (I \blacktriangleright) button (see page 32)
 ㉑ REV (I \blacktriangleleft) button (see page 32)
 ㉒ RESUME button (see page 31)
 ㉓ STOP (■) button (see page 29)
 ㉔ PLAY (▶) button (see page 29)
 ㉕ CLEAR (C) button (see page 41)
 ㉖ Number buttons (see page 21)
 ㉗ RETURN (⌚) button (see page 41)
 ㉘ TITLE button (see page 38)
 ㉙ SUBTITLE ON/OFF button (see page 48)
 ㉚ SUBTITLE (□) button (see page 48)
 ㉛ SETUP button (see page 17)
 ㉜ VIRTUAL button (see page 52)

<TV CONTROL>
 (see page 12)

㉝ VOL (volume) \oplus button
 ㉞ VOL (volume) \ominus button
 ㉟ CH (channel) \blacktriangleup button
 ㉟ CH (channel) \blacktriangledown button
 ㉞ INPUT button
 ㉟ OPERATE button of TV CONTROL

*DIMMER feature: Use this button to set the front panel display brightness to Bright or Dark.

Inserting the Batteries

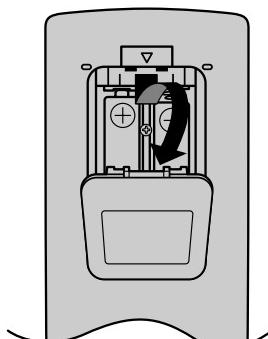
First, install the batteries as detailed below. Fit two R6 (UM/SUM-3 or AA) 1.5 volt batteries (included) or equivalent.

If the remote control stops working, insert new batteries.

Ensure the batteries are inserted correctly, matching the polarities (+/-) indicated in the remote control.

NOTE

- After changing the batteries in the remote control, the brand setting for the TV must be re-entered. (See page 12.)
- Do not subject the remote control to shock, water or excessive humidity.
- The remote control may not function if the DVD Player sensor is in direct sunlight or any other strong light.
- Incorrect use of batteries may cause them to leak or burst. Read the battery warnings and use the batteries properly.
- Do not mix old and new batteries, or mix brands in use.
- Remove the batteries if you will not use the remote control for an extended period of time.





Using the Remote Control for TV Operation

The provided remote control can operate the basic functions of your television. In addition to most Sharp televisions, other manufacturers' televisions listed below can also be controlled by setting the remote control to the corresponding TV brand. The remote control's default brand is "SHARP", which enables control of most Sharp televisions. When you replace the batteries in the remote control, the control's TV brand setting will be reset to SHARP.

Setting the TV brand

- 1 Turn on your TV.
- 2 From the table below select the button which corresponds with the brand of your TV. Simultaneously press both this button and the **OPERATE** button (TV control) on the remote control facing toward TV. Hold them down for about five seconds.
When setting is complete, the remote control will send a "power off" signal to the TV, and it should turn off.

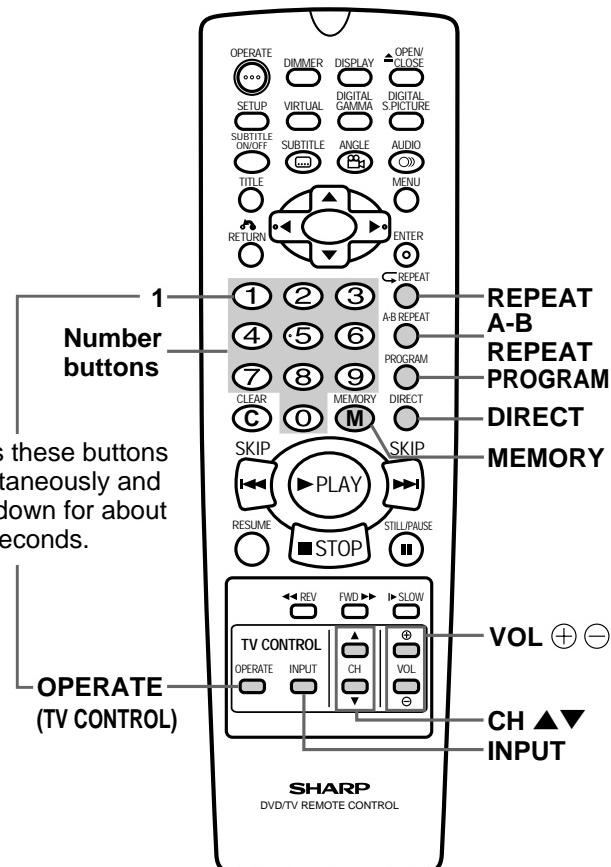
NOTE

- If the TV does not turn off in step 2, repeat the step 2 setting procedure and select the button for a different brand.

TV BRAND NAME	Corresponding button
SHARP	1
PHILIPS	2
THOMSON	3 or 4
GRUNDIG	5
FERGUSON	6
ITT NOKIA	7
SONY	8
TOSHIBA	9
PANASONIC	0 or M
HITACHI	REPEAT
SANYO	A-B REPEAT
JVC	PROGRAM
MITSUBISHI	DIRECT

(For example)

TV brand: SHARP (Corresponding button is "1")



TV functions to be controlled

TV function control

- 1 Use the following buttons on your remote control to operate your TV set.

TV functions

- TV power: (**OPERATE** button (TV control))
- TV channel up/down: (**CH ▲▼**)
- TV volume up/down: (**VOL + -**)
- AV-TV selector: (**INPUT** button)

IMPORTANT NOTE:

Although the provided remote control unit is compatible with most Sharp televisions, as well as many TV models manufactured by others, it is possible that the provided remote control will not work with your TV, or will control only some of the functions.

If the button listed in the table does not work with your TV set, you may want to try another; occasionally, models vary within a brand.

Consequently, Sharp's warranty does not cover all of the models under the brands listed in the table.



Basic Connection

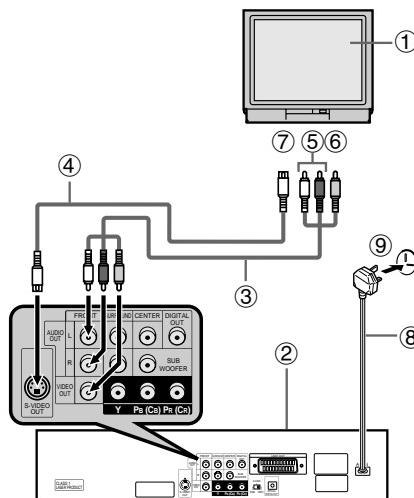
- Set the power switch on the player and equipment to be connected to OFF before connecting.
- Read through the Operation manual for the equipment to be connected.
- Be sure that the colours of the connectors and plugs match up when connecting the lead.

The connections described below are for video connection to the S-VIDEO OUT, VIDEO OUT or LINE1 OUT (21-pin Euro-SCART) connector.

Notes on Installation:

Bundling the lead connecting the DVD player and television with the antenna cable can cause electrical interference when you are watching television programmes. Be sure to keep the DVD player connection leads separate from the antenna lead when you install the player.

A



SETTING UP

Connecting to a Stereo TV Set **A**

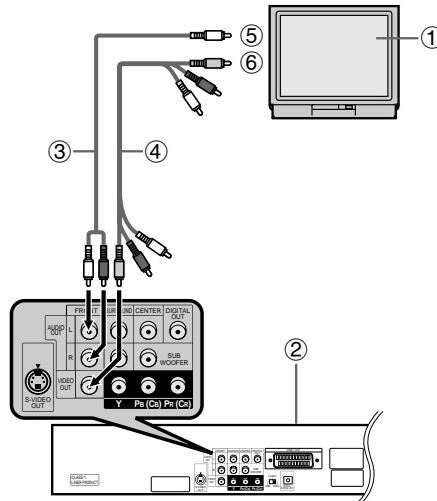
- TV set (sold separately)
 - DVD player
 - Video/audio lead (supplied)
 - S-video lead (supplied)
 - To audio input connectors (red, white)
 - To video input connector (yellow)
 - To S-video input connector
 - AC power lead
 - To power outlet (AC 220-240V, 50/60Hz)
- For LINE1 OUT connection, see page 14.
 - Refer "VIRTUAL Surround (Audio) Selection" on page 52.

S-video Output Connector

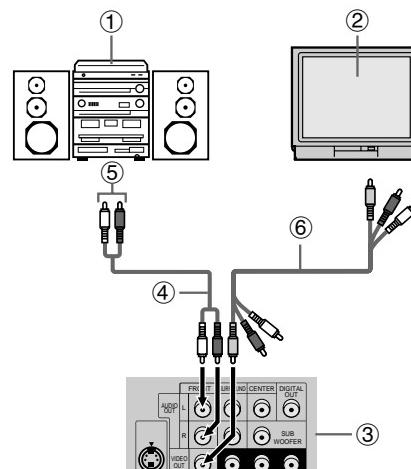
The S-Video (separate) output connector provides access to separate colour (C) and luminance (Y) signals before they are combined into composite video (VIDEO OUT). This gives a sharper picture as the TV set no longer has to separate them.

Use the S-video lead when connecting the player to a TV set equipped with an S-video input connector for the best picture clarity possible.

B



C



Connecting to a Monaural TV Set **B**

- TV set (sold separately)
 - DVD player
 - Audio lead (not supplied)
 - Video/audio lead (supplied)
 - To audio input connector
 - To video input connector
- For LINE1 OUT connection, see page 14.

Connecting to Audio Equipment **C**

- Audio equipment (sold separately)
 - TV set (sold separately)
 - DVD player
 - Audio lead (not supplied)
 - To audio input connectors (red, white)
 - Video/audio lead (supplied)
 - S-video lead (supplied) (See above **A**)
- For LINE1 OUT connection, see page 14.

NOTE

Downloaded From DiscPlayer.com Sharp Manuals

- When connecting to audio equipment (2ch), set the SPEAKER setting in the SET UP window to "2ch /DIGITAL". See page 20.



Optional Audio Connection

Connecting to an AV Amplifier

This DVD player contains a Dolby Digital, MPEG Audio 1/2 or DTS decoder.

- When DVDs recorded in Dolby Digital, MPEG Audio 1/2 or DTS are played back, you can use an amplifier that is not equipped with a Dolby Digital, MPEG Audio 1/2 or DTS decoder.

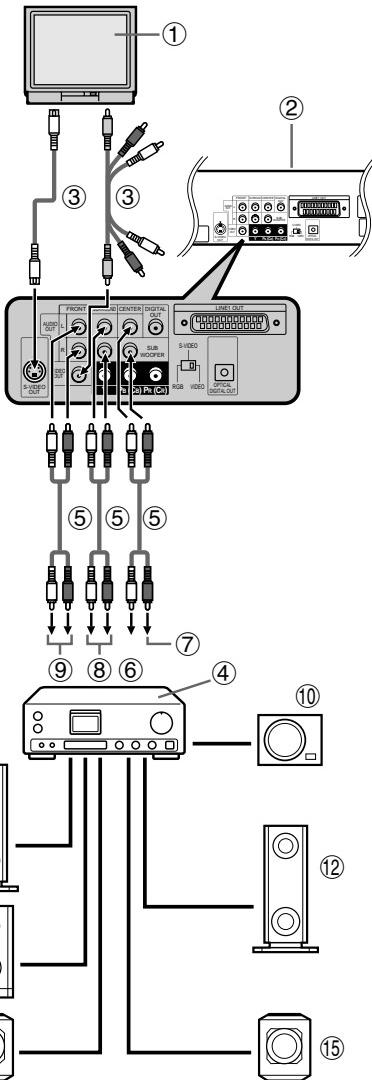
- ① TV set (sold separately)
- ② DVD player
- ③ Video/audio lead (supplied)
S-video lead (supplied) (See **A** on page 13)
- ④ Amplifier (not supplied)
- ⑤ Audio leads (not supplied)
- ⑥ To audio input connector (CENTER)
- ⑦ To audio input connector (SUBWOOFER)
- ⑧ To audio input connectors (SURROUND L•R)
- ⑨ To audio input connectors (FRONT L•R)
- ⑩ Centre speaker
- ⑪ Front speaker (Left)
- ⑫ Front speaker (Right)
- ⑬ Subwoofer
- ⑭ Surround speaker (Left)
- ⑮ Surround speaker (Right)
- (⑯-⑯) sold separately

- For LINE1 OUT connection, see below.

NOTE

- Placing the DVD player near a tuner or radio could cause interference during AM broadcast reception. If this occurs, move the tuner or radio further away.
- The speaker connections describe the example used here. For more information, refer to the Operation manual for your AV amplifier.
- For the connection of "5ch", ⑦ and ⑬ above are not necessary (see page 20).

- "DTS" and "DTS Digital Surround" are trademarks of Digital Theater Systems, Inc.



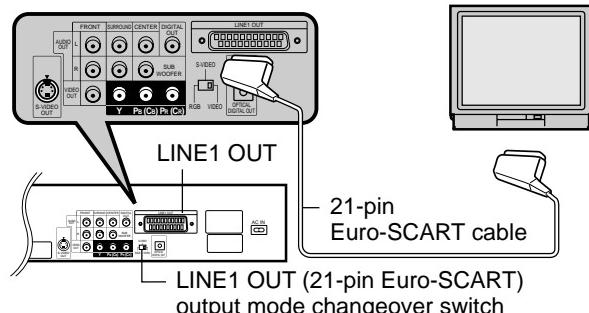
Connecting to a Monitor or TV Equipped with a 21-pin Euro-SCART Connector

When connecting the player to a TV set equipped with a 21-pin Euro-SCART connector, use a 21-pin Euro-SCART cable (commercially available) connected to the LINE1 OUT connector instead of the video/audio cable supplied with the player connected to the VIDEO OUT connector. The output signal from the LINE1 OUT (21-pin Euro-SCART) connector changes according to the position to which the LINE1 OUT (21-pin Euro-SCART) output mode changeover switch is moved. (See page 10.)

1. If you switch the DVD player on while you are watching a TV broadcast, the TV screen automatically switches to AV mode and starts showing the DVD image.
2. If you press the **■ STOP** button and the STOP mode remains for more than 5 minutes while you are watching a DVD disc on the TV, the DVD image disappears and the picture reverts to the original image. If you then press the **▶ PLAY** button, the DVD image returns.

NOTE

On some TVs, the above operations may not work as described.





Connecting to a Decoder or an Amplifier with Dolby Digital / MPEG Audio 1/2 / DTS Processing

When DVDs recorded in Dolby Digital, MPEG Audio 1/2 or DTS are played, the bit stream of Dolby Digital, MPEG Audio 1/2 or DTS is output from the DVD player's OPTICAL DIGITAL OUT connector and DIGITAL OUT connector. When the DVD player is connected to a Dolby Digital, MPEG Audio 1/2 or DTS decoder, you can enjoy theatre-quality audio right in your home. (An optional optical digital cable is required when an optional Dolby Digital, MPEG Audio 1/2 or DTS decoder is used. Similarly, you must purchase a separate cable when you use the DIGITAL OUT connector.)

Preparations:

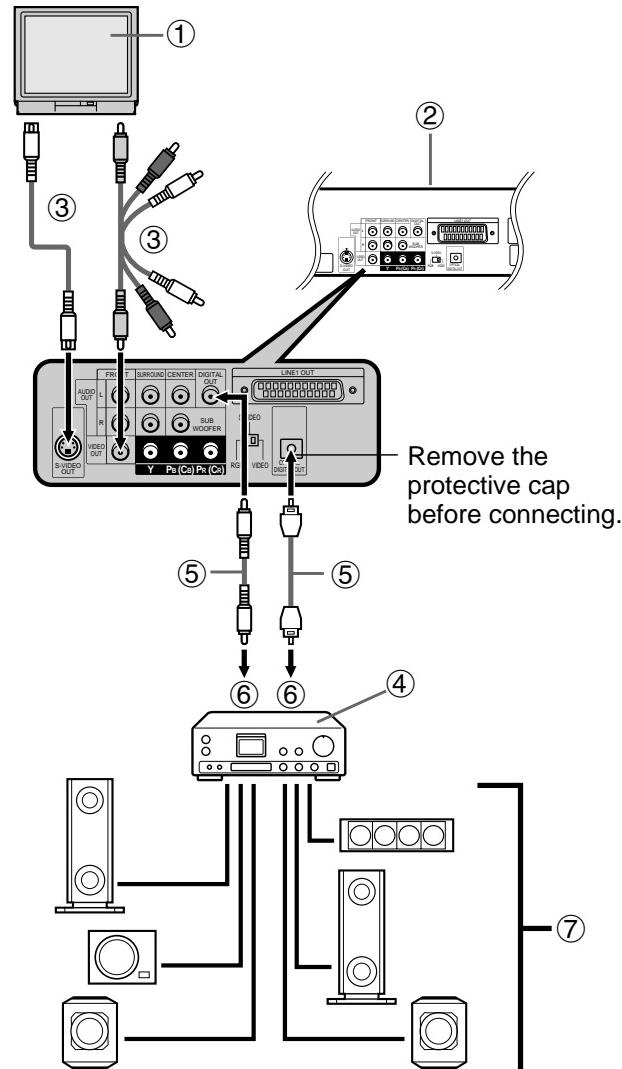
- If you are using the OPTICAL DIGITAL OUT or DIGITAL OUT connectors, the SPEAKER setting in the SET UP window must be set to "2ch/DIGITAL".
- ① TV set (sold separately)
② DVD player
③ Video/audio lead (supplied)
S-video lead (supplied) (See **A** on page 13)
④ Decoder or Amplifier with Dolby Digital /
MPEG Audio 1/2 multi channel (5.1ch) / DTS
processing (not supplied)
⑤ Optical digital cable (not supplied)/or coaxial cable
(not supplied).
**(Use the appropriate cable for your audio
system.)**
⑥ Connector for optical digital sound input or coaxial
digital input.
**(Use the appropriate connector for your audio
system.)**
⑦ Connect the speakers. (See page 14.)
- For LINE1 OUT connection, see page 14.

NOTE ➔

- This DVD player has four kinds of digital output audio streams: MPEG, Dolby Digital, LPCM and DTS. **DIGITAL** on the front panel display lights only for Dolby Digital, and not for MPEG, LPCM and DTS.
- For DTS CD playback, audio mode should be set to "L+R". The Digital Out signal can not be output correctly if audio mode is set to "L" or "R". (See page 49.)

CAUTION:

Some audio CDs and video CDs have a short silent section between musical tracks. When sound from discs such as these is digitally recorded by connected directly to a digital recorder (such as an MD player), the music may be recorded continuously and track numbers may be lost.



Remove the
protective cap
before connecting.



Turning on the TV and the DVD player

- 1 Turn on the TV, and select the external channel to which the DVD player is connected.
- 2 Turn on the DVD player by pressing the **OPERATE** button. When the startup screen shown at right appears on the TV screen, the preparations are complete.



Startup Screen

Turning the DVD player power to the Standby mode or to the Active mode.

Standby mode and Active mode

This DVD player has these two working modes. Each time you press the **OPERATE** button, the power turns to the Active mode or to the Standby mode alternately.

These two modes work as shown in the right table.

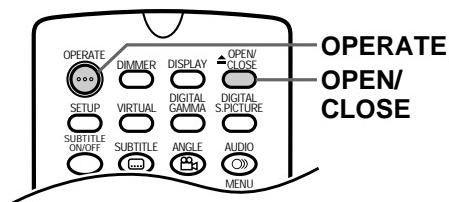
	Standby indicator	Front panel Display	VIDEO Output signal
Standby mode	On	Off	Off
Active mode	Off	On	On

Turning the power to the Active mode (ON).

Press the **OPERATE** button to turn on the DVD player. At this time, the **STANDBY** LED indicator on the DVD player goes out and the DVD player enters the Active mode.

NOTE

- When pressing the **▲OPEN/CLOSE** button in the Standby mode, the DVD player is also turned on and it enters the Active mode.

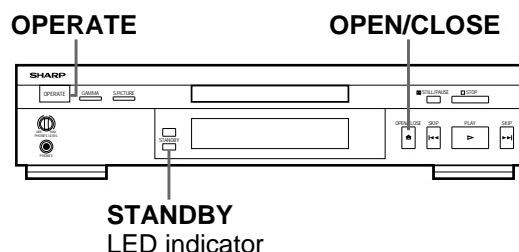


Turning the power to the Standby mode

Press the **OPERATE** button to turn to the Standby mode while the DVD player is in the Active mode. At this time, the **STANDBY** LED indicator on the DVD player lights and the DVD player enters the Standby mode.

Auto power-off function

- If no button is pressed within 30 minutes after the playback of a disc stopped, the DVD player automatically enters the Standby mode.



Setup

Before you use this DVD player, make the settings necessary to you of the following 6 settings.

- TV MODE SET Specifies the settings for the type of TV connected and the playback format for wide-screen video material.
- SPEAKER Specifies the settings for the number and type of audio components and speakers connected, and for whether the DVD is connected to a TV or a stereo system.
- PARENTAL Use this setting for playing DVD discs on which PARENTAL levels have been recorded.
- Sets or changes the parental level (1 to 8).
 - Sets or changes the password used to prevent the parental level from being changed too easily.
- PRO LOGIC Use this setting for playing discs recorded using Dolby Pro Logic via an analogue connection.
- OSD LANGUAGE SETUP... Selects and sets a language you want to use of the 7 languages on the screen displays.
- DISC MENU LANGUAGE... Selects and sets a language you want to use of the languages recorded in the disc for the disc menu. Only the languages recorded in a disc can be used.

NOTE

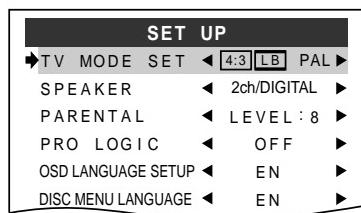
- The OSD (On Screen Display) screens used in this Operation Manual are purely for the purposes of explanation. The actual displays (set displays) may differ slightly from what is shown here.

When turning on your DVD player for the first time after purchasing it

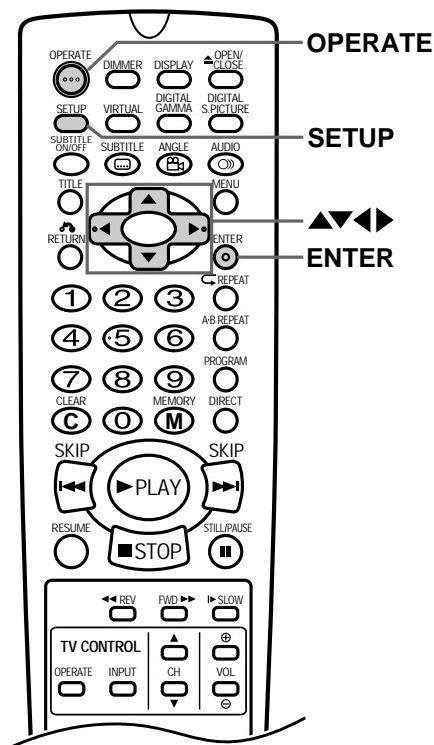
- 1 Turn on your TV and select the external channel to which the DVD player is connected. Then press the **OPERATE** button to turn on your DVD player.
- 2 Press the **SETUP** button on the remote control. The OSD LANGUAGE SETUP screen appears.
This screen is for the first initial setting after purchasing your DVD player and it is only one time that this screen appears after pressing the **SETUP** button.



- 3 Use the **▲▼◀▶** or **➡** button in  to move the screen cursor (**➡**) to select the language you want to use.
- 4 Press the **ENTER** button on the remote control. The SET UP screen in your selected language appears as shown below.



(Example:
EN (English) selected)



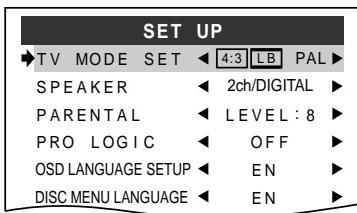
CAUTIONS:

- After the second time when you press the **SETUP** button, this SET UP screen appears immediately.
- You can change OSD LANGUAGE whenever you want. For details, please refer to "OSD (On Screen Display) LANGUAGE SETUP Setting" on page 23.

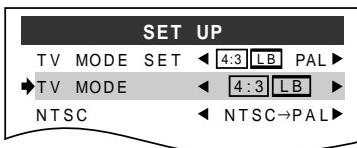


TV MODE SET Setting

- 1 On the SET UP screen, use the \blacktriangle or \blacktriangledown button in \odot to move the screen cursor (\rightarrow) to TV MODE SET.



- 2 Use the \blacktriangleleft or \blacktriangleright button in \odot and then the screen below appears.



- 3 On the screen above, use the \blacktriangle or \blacktriangledown button in \odot to move the cursor screen (\rightarrow) to TV MODE.

- 4 Use the \blacktriangleleft or \blacktriangleright button in \odot to select $\boxed{4:3}$ \boxed{LB} , $\boxed{4:3}$ \boxed{PS} or $\boxed{16:9}$.

- $\boxed{4:3}$ \boxed{LB} — (Letterbox mode): When wide-screen video material is played in this mode on a conventional TV screen, black bands appear at the top and bottom of the screen.
- $\boxed{4:3}$ \boxed{PS} — (Pan & Scan mode): When wide-screen video material is played, this mode clips the right and left sides of the image so that it can be viewed on a conventional TV screen.

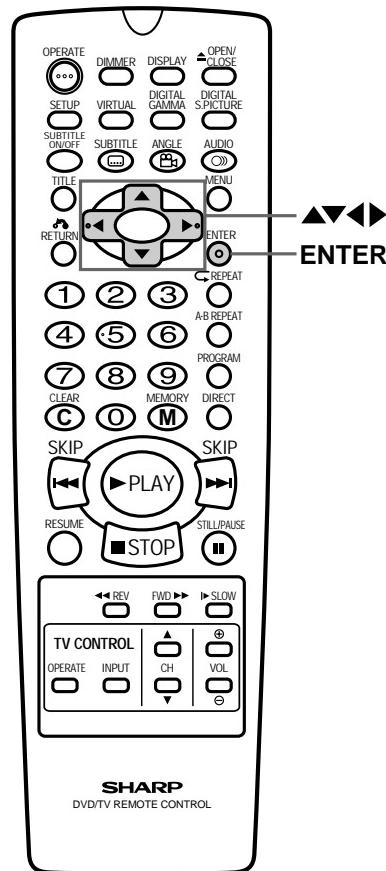
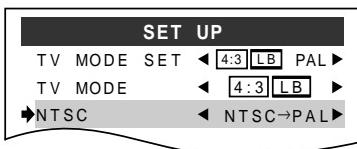
NOTE

- Some wide-screen (DVD discs) that do not permit Pan & Scan mode playback are automatically played in letterbox mode (black bands top and bottom).
- When you are connecting the DVD Player to a TV set with an aspect ratio of 4:3 using the LINE1 OUT (21-pin Euro-SCART) connector, specify $\boxed{4:3}$ in the initial setup for the DVD player. If $\boxed{16:9}$ is specified in the initial setup, the input selector function on the TV may not function correctly.
- $\boxed{16:9}$ — (Wide-screen TV): This is the correct mode for playing wide-screen videos on a wide-screen TV.

NOTE

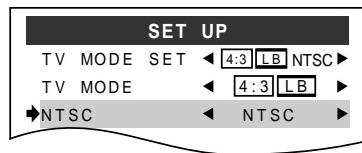
- You must also set the screen mode on your wide-screen TV to "FULL".

- 5 Press the \blacktriangledown button in \odot to move the cursor screen (\rightarrow) to NTSC.



**6** Use the **◀** or **▶** button in to select NTSC or NTSC→PAL.

- NTSC→PAL: Set this when you play back the NTSC discs on a PAL TV.
(The NTSC signal is converted to a modified PAL signal.)
- NTSC: Set this when you play back the NTSC discs on a Multi System TV compatible with NTSC or on an NTSC TV.
(The NTSC signal is output without conversion.)



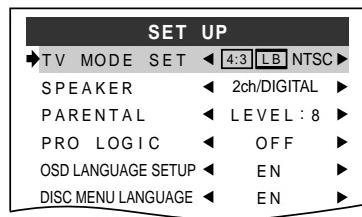
(Example: NTSC selected)

NOTE

- When you play back the PAL discs, either setting of NTSC→PAL or NTSC can be used on a PAL TV or a Multi System TV.

7 Once you have completed the settings, press the **ENTER** button on the remote control to confirm the TV MODE SET setting. The normal SET UP screen then reappears.

If you intend to go on and specify other settings (SPEAKER, PARENTAL, PRO LOGIC, OSD LANGUAGE SETUP or DISC MENU LANGUAGE), proceed to the next setting using the **▲** or **▼** button in .

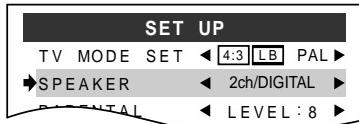
**NOTE**

- Once you have completed all the settings necessary to you, press the **ENTER** button to return to the startup screen.

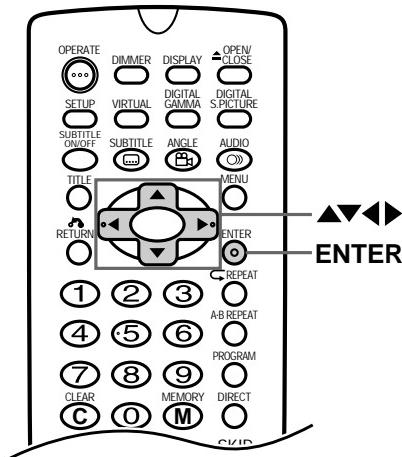
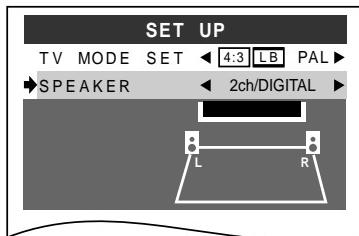


SPEAKER Setting

- 1** Use the ▲ or ▼ button in  to move the screen cursor (➡) to SPEAKER.



- 2** Press the **◀** or **▶** button in  once to display a schematic diagram of the current speaker setup.



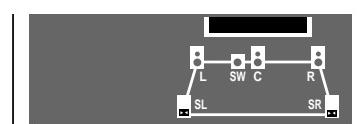
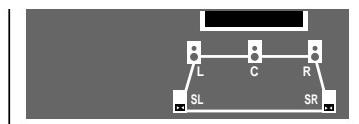
Select “2ch/DIGITAL”, “5ch” or “5.1ch” as the speaker system type.

- **2ch/DIGITAL** — Select this option when you are connecting to the audio input on a stereo TV or to audio equipment that uses 2 speakers.
 - **Digital Output:**
Always use the “2ch/DIGITAL” setting if you are using the OPTICAL DIGITAL OUT or DIGITAL OUT connectors.

NOTE

- For a monaural TV, use the "2ch/DIGITAL" setting.
 - If you are connecting to 2-channel audio equipment or a TV (connected to AUDIO OUT "FRONT"), do not select "5ch" or "5.1ch" as this could result in defective sound.

- 5ch — Select this option when you are connecting to audio equipment that uses 5 speakers.
(2 front speakers, 1 centre speaker, 2 surround speakers)
 - 5.1ch — Select this option when you are connecting to audio equipment that uses 6 speakers.
(2 front speakers, 1 centre speaker, 2 surround speakers and 1 subwoofer)
 - Analogue Output:
Always use the “5ch” or “5.1ch” setting if you are using the AUDIO OUT “FRONT”, “SURROUND”, “CENTER” or “SUBWOOFER” connectors.



- 3** Press the **◀** or **▶** button in  to select the number of channels (“2ch/DIGITAL”, “5ch” or “5.1ch”).

NOTE

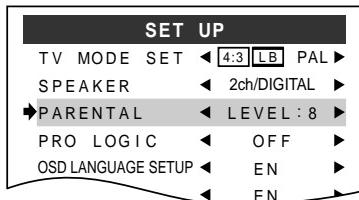
- If your speaker system does not match the schematic OSD, you will not be able to play back the true original sound. In this event, use the "2ch/DIGITAL" setting.

- 4** If you want to complete the settings here, press the **ENTER** button on the remote control to exit the setup procedure. If you intend to specify the next setting, proceed to its step 1 using the **▲** or **▼** button in .

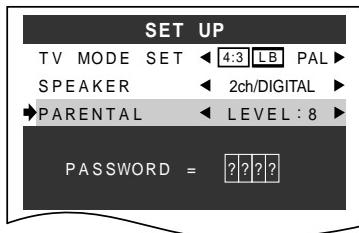


PARENTAL Level Setting

- 1 Use the ▲ or ▼ button in to move the screen cursor (➡) to PARENTAL.



- 2 Press the ◀ or ▶ button in once to display the password specification and modification screen.



NOTE

- Use the ▲ or ▼ button in to move between items of setting.
- Press the RETURN button on the remote control to return to the screen in step 1.
- Factory setting keeps parental level 8.

- 3 Use the number buttons (0 to 9) on the remote control to enter a 4-digit password.

PASSWORD = **1 2 3 4** — Displayed when "1234" is being entered as the password.

NOTE

- Enter the numbers slowly as each number is stored separately.
- Press the **CLEAR** button on the remote control to return to the previous step.
- When you have finished entering your 4-digit number, (password verification display) appears.

If you have already set your password:

- appears in step 2 above.

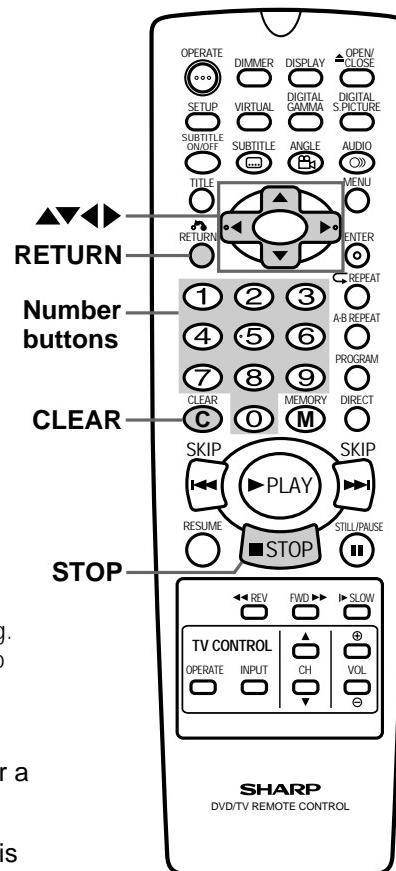
- 4 To confirm your password, re-enter the numbers you entered in step 3 (using the number buttons on the remote control).

NOTE

- At this point, the background colour for the dash shown changes from yellow to white.
- If you make a mistake entering the password, (error symbol) appears to the right of the numbers frame.
- If you enter the wrong number three times in succession, the normal screen reappears.
- On some DVD discs, the PARENTAL level setting is fixed and cannot be modified.
- See page 26 for information on setting the TEMPORARY PARENTAL level.

If you forget your password, you can erase your current password by pressing the **■ STOP** button four times in step 3 above.

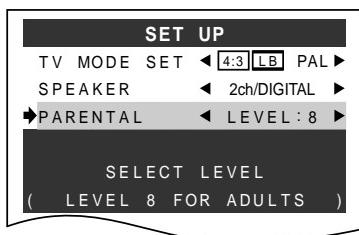
- At this point, the background colour for the dash shown changes from yellow to white when the **■ STOP** button is pressed. The 4 numbers disappear and the display reappears.



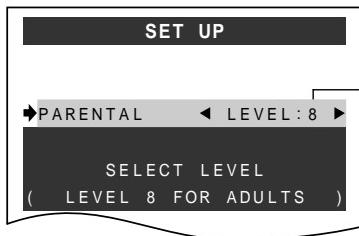


Setup

- 5** When the correct password is entered, the parental level modification screen appears.



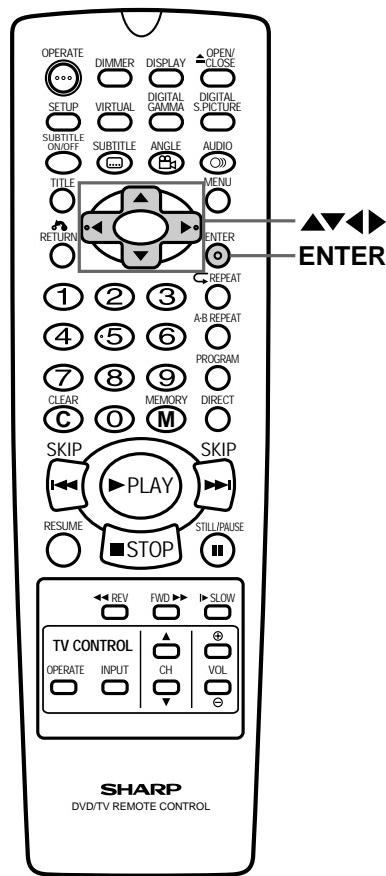
- Press the **◀** or **▶** button in to change the parental level.
(Example) When the current level is 8:



Can be changed to any number between 1 and 8.

- Level 1: for general viewing (highly restricted level that can be viewed by anyone. Sensational scenes are cut or replaced with other scenes.) → Level 8: for adults only (a level to be viewed by adults only. Unrestricted view of any scene)
(The smaller the number, the greater the level of restriction.)

- 6** If you want to complete the settings here, press the **ENTER** button on the remote control to exit the setup procedure. If you intend to specify the next setting, proceed to its step 1 using the **▲** or **▼** button in .



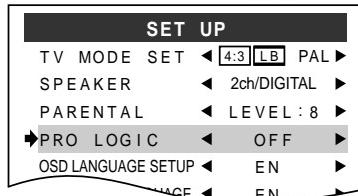
PRO LOGIC Setting

Use this setting for playing discs recorded using Dolby Pro Logic via an analogue connection.

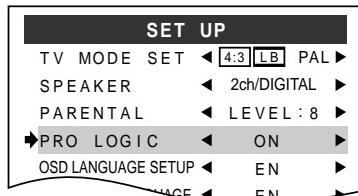
Caution:

- Only DVD discs that have been recorded using Dolby Pro Logic can be listened to in Pro Logic.

- 1** Use the **▲** or **▼** button in to move the screen cursor (**▶**) to PRO LOGIC.



- 2** Use the **◀** or **▶** button in to select "ON" or "OFF".
ON: Use this setting when playing Pro Logic audio with the SPEAKER setting set to "5ch" or "5.1ch".
Use this setting when using Virtual Surround with the SPEAKER setting set to "2ch/DIGITAL".
OFF: Use this setting when playing surround sound (Pro Logic) with the SPEAKER setting set to "2ch/DIGITAL".



- 3** If you want to complete the settings here, press the **ENTER** button on the remote control to exit the setup procedure. If you intend to specify the next setting, proceed to its step 1 using the **▲** or **▼** button in .

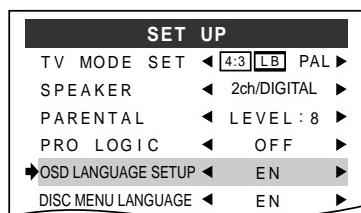


OSD (On Screen Display) LANGUAGE SETUP Setting

You can select and set a language you want to use on the screen displays.

For the first OSD LANGUAGE setting after purchasing your DVD player, please see page 17.

- 1 Use the **▲** or **▼** button in to move the screen cursor (**→**) to OSD LANGUAGE SETUP on the SET UP screen.



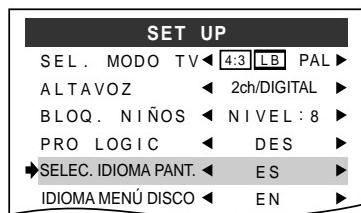
- 2 Press the **◀** or **▶** button to show the OSD LANGUAGE SETUP screen.



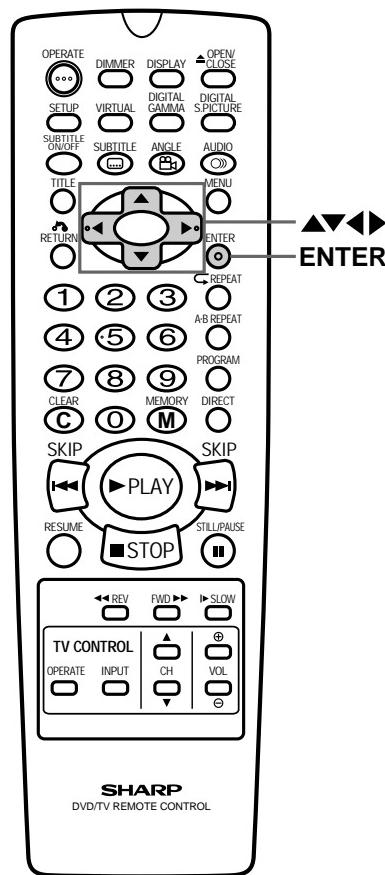
- 3 Then use the **▲** **▼** **◀** or **▶** button in to move the screen cursor (**→**) to the desired language.



- 4 After you select the language, for example ESPAÑOL, press the **ENTER** button. Then the SET UP screen appears and then OSD LANGUAGE changes from English to Español.



- 5 If you want to complete the settings here, press the **ENTER** button on the remote control to exit the setup procedure.
If you intend to specify the next setting, proceed to its step 1 using the **▲** or **▼** button in .
- 6 If you want to return to the initial OSD language, repeat step 2 and 3 above and select it.



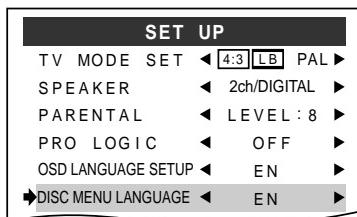


DISC MENU LANGUAGE Setting

You can select and set a language you want to use for the disc menu. The disc menu language you set here will be displayed if it is recorded in a disc, but if it is not recorded, the prior language recorded in the disc will be displayed.

• Selecting a language from 7 languages on DISC MENU LANGUAGE

- 1 Use the ▲ or ▼ button in to move the screen cursor () to DISC MENU LANGUAGE on the SET UP screen.

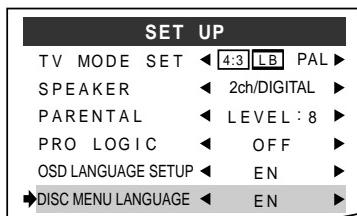


- 2 Press the ◀ or ▶ button to show the DISC MENU LANGUAGE screen.
Use the ▲ ▼ ◀ or ▶ button in to move the screen cursor () to the desired language.



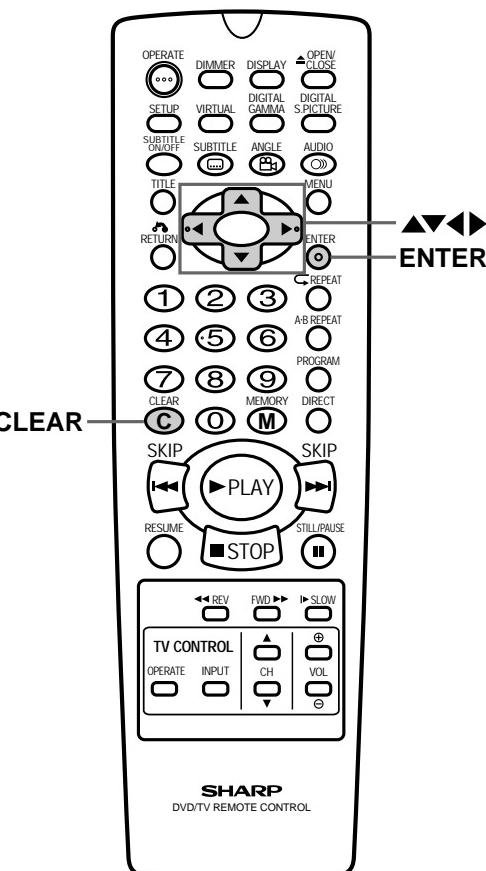
- 3 Press the ENTER button to return to the SET UP screen in the selected language.

(Example: EN (English) selected)



• Selecting a language from OTHER

- 1 If you want to use a language that is not displayed as the 7 languages above, use the ▲ ▼ ◀ or ▶ button in to move the screen cursor () to "OTHER".
- Please refer to "Language Code List on Menu Screen" on page 53.



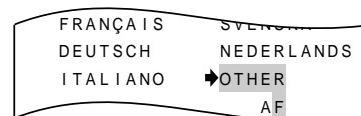
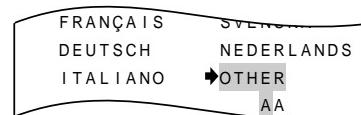


- 2 Press the **ENTER** button to input a language code (two letters), for example "AF".
- 3 Use the **▲** or **▼** button to select "A" as the first letter, use the **◀** or **▶** button to move to the second place, then use the **▲** or **▼** button to select "F".

NOTE

- When "A" is selected for the first letter, only letters to the right of codes beginning with "A" can be selected as the second letter. Refer to the codes beginning with "A" on "Language Code List on Menu Screen" on page 53.
Example: First letter – A
Second letter – A, B, F, M, R, S, Y or Z
- If you input wrong country code in -, you can erase your wrong letter using the **CLEAR** button.

(Example: AF (Afrikaans) selected)

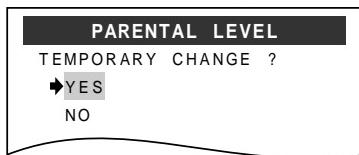


- 4 If you want to complete the settings here, press the **ENTER** button on the remote control to exit the setup procedure.
If you intend to specify the next setting, proceed to its step 1 using the **▲** or **▼** button in .



TEMPORARY PARENTAL Level Setting

In addition to the PARENTAL LEVEL setting on pages 21 and 22, some DVD discs will prompt the viewer to temporarily change the parental level. In this event, the following screen appears.



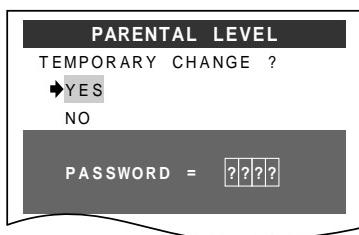
When this screen appears, use the procedure described below to temporarily change the level.

NOTE

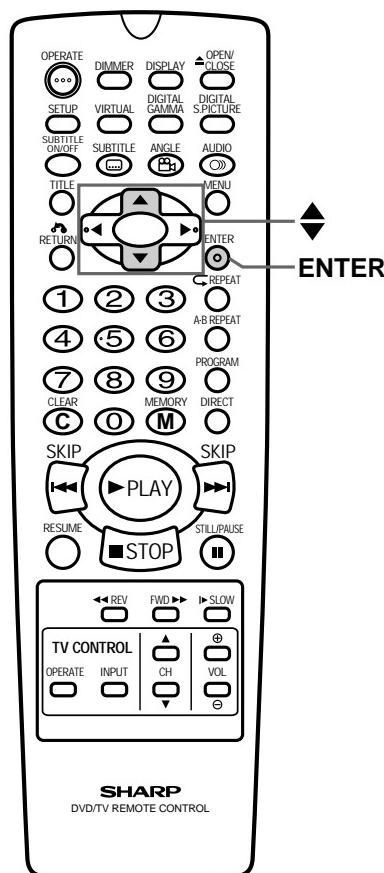
- This change only applies while the current disc is being played.
 - Factory setting keeps parental level 8.
- 1** Use the **▲** or **▼** button in to select "YES" or "NO".
YES: Temporarily changes the parental level (sets the level to a value other than the initial setting (page 21)).
NO: Does not change the parental level (maintains the level set initially (page 21)).

2 Press the **ENTER** button on the remote control.

- If "NO" was selected in step 1, the normal screen reappears.
- If "YES" was selected in step 1, the following screen appears.



- To temporarily change the parental level, enter your password (page 21) and confirm the password. The setting automatically changes temporarily to the disc-specific parental level.
- When you have completed the TEMPORARY CHANGE procedure, press the **ENTER** button on the remote control. (The normal SET UP screen reappears.)





Display Information

No Disc Indicator

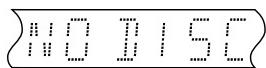
A NO DISC appears when the tray is closed and:

- 1) There is no disc in the tray.

<On the TV screen>



<Front panel display>



Disc Error Indicator

A disc error appears when the tray is closed and:

- 1) The disc type is not DVD, VCD or CD.
- 2) The disc is not loaded correctly (upside-down, etc.).

<On the TV screen>



<Front panel display>



Region (Locale) Number Error Indicator

If you play a DVD disc and the region (locale) number of the player differs from the region number of the disc (see page 6), the symbol appears on the TV screen and playback stops. (The disc cannot be played.)

Parental Level Error Indicator

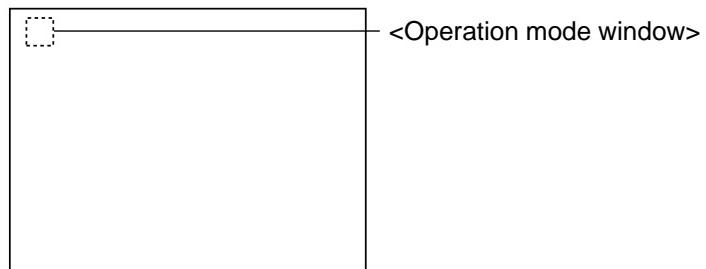
When you play a DVD disc, if the parental level set for the player does not match the parental level of the disc, the symbol appears on the TV screen and playback stops. (The disc cannot be played.)



Operation Mode Indicators

The display on the TV screen switches from "AUTO" to "ON" to "OFF" and back to "AUTO" each time the **DISPLAY** button on the remote control is pressed.

- AUTO mode — Displayed for 3 seconds when operation begins.
- ON mode — Displayed continually until the operation mode is changed.
- OFF mode — Not displayed.



Display Examples

	TV Screen	Front Panel Display	Remarks
If no disc is loaded or an unplayable disc is loaded when the player is switched on		 or 	
Tray open			
Tray closed			
Loading			
Stopped			The time indicator changes to show other indicators (total time, etc.).
Playing			
Still/Paused		 or 	Differs depending on the disc being played.
Fast forward			
Fast reverse			
Slow			Does not function for VCDs or CDs.
Playback control			

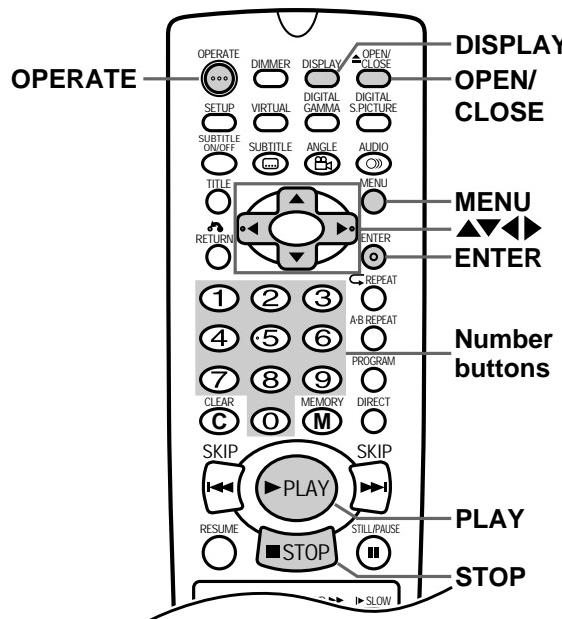
DVD Playback

Preparations

- Switch on the TV set's power, and select "VIDEO" or "AV" as the TV input. Refer to the operation manual for your TV for details.
- Switch on the stereo system's power if the DVD player has been connected to a stereo system.

NOTE

- Disc menus are recorded on some DVD discs. With discs of this type, you can view the disc menu by pressing the **MENU** button on the remote control. You can then select the playback options (eg. subtitles, audio language, subtitle language, etc.) by using the number buttons (0 to 9) or the cursor control buttons to select an option and pressing the **ENTER** button on the remote control to confirm your selection.
- You can make the settings of the Setup procedure (see pages 17 - 25) during playback of a disc. TV MODE SET and PARENTAL, however, can not be set during playback, even if they are displayed.
- When you reset SPEAKER and PRO LOGIC settings during playback, the sound is interrupted for an instant. However, this is not a malfunction of the DVD player.



Basic Play

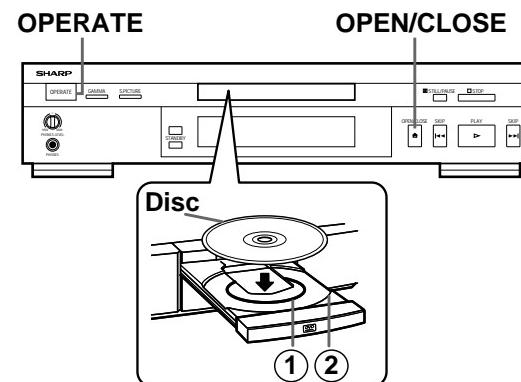
- Press the **OPERATE** button.
- Press the **▲OPEN/CLOSE** button to open the disc tray.
- Place a disc onto the tray.
Hold the disc without touching either of its surfaces, position it with the printed title side facing up, align it with the guides, and place it in its proper position.
 - ① 8 cm (3") disc
 - ② 12 cm (5") disc

CAUTION:

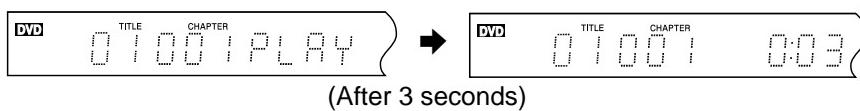
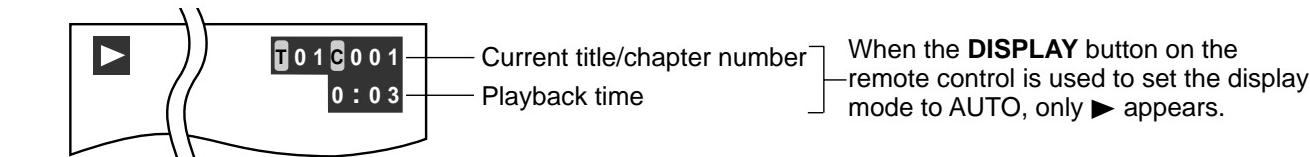
Do not place more than one disc on the tray. This can damage the player and the discs.

- Press the **▲OPEN/CLOSE** button to close the disc tray.
- Press the **▶PLAY** button to play back a disc.
When you want to stop playback, press the **■ STOP** button.

- If no menu or titles are recorded at the start of the disc, the disc begins playing immediately.
- Discs can also be played in Slow, Still, Frame Advance, Fast Forward and Fast Reverse modes.



BASIC OPERATIONS



- If the disc has one or more titles recorded on it, a menu screen will appear on the TV monitor after a few moments (with TITLE MENU disc only).

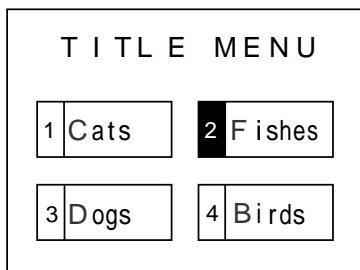
NOTE

- On some discs, chapters are not displayed.



DVD Playback

- 6 Use the cursor controls (or a number button) on the remote control to select the desired title. (Highlight the desired title number.)

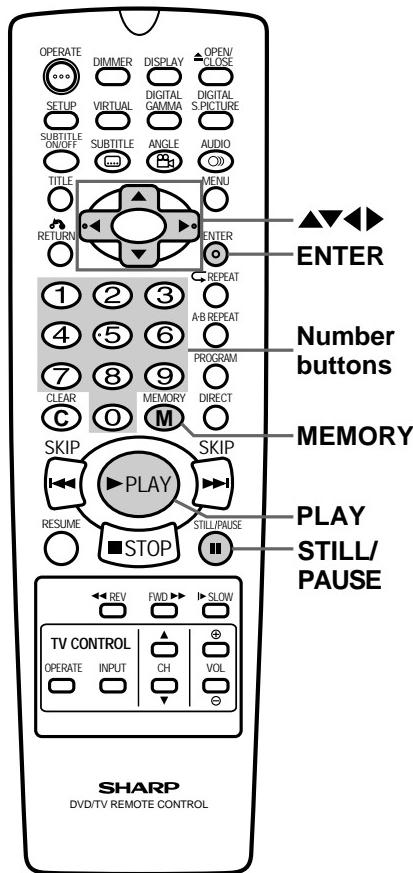


(Example: EN (English) is selected in DISC MENU LANGUAGE setting on page 24 or 38.)

- 7 Press the **ENTER** or **MEMORY** button on the remote control.

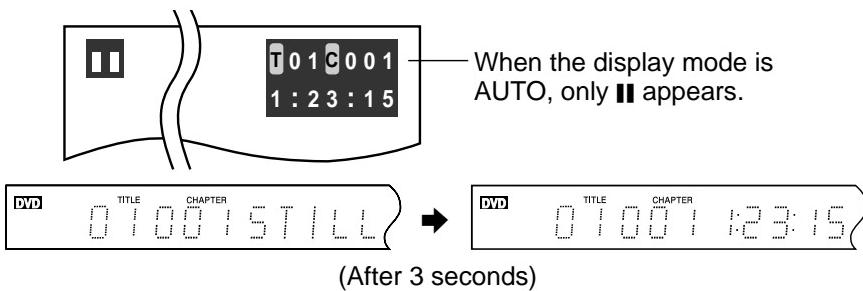


Play of the selected item now commences.



Still Picture

- 8 Press the **■ STILL/PAUSE** button.



- 9 If you press the **▶ PLAY** button while a still image is displayed (STILL/PAUSE), normal playback resumes.



Frame Advance

10 Press the **II STILL/PAUSE** button in the still picture mode.

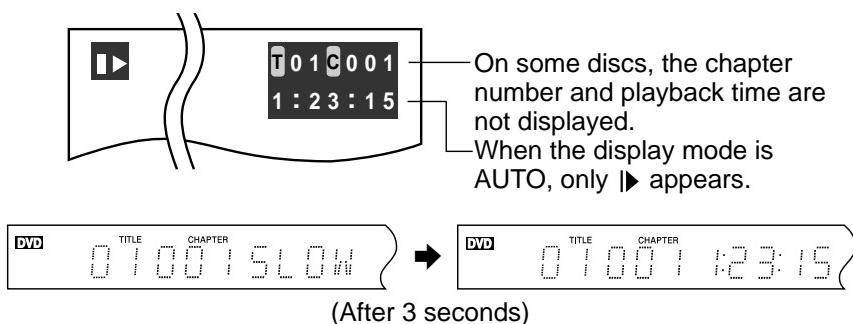
- The disc is advanced by one frame each time the button is pressed.

To Return to the Normal Play

Press the **▶ PLAY** button.

Slow-Motion Play

11 Press the **▶ SLOW** button on the remote control in the play mode or still mode.



NOTE

- Slow-motion playback cannot be used in reverse.
- On some discs, the slow-motion playback functions are disabled.

To Return to the Still Picture Mode

Press the **II STILL/PAUSE** button.

To Return to the Normal Play

Press the **▶ PLAY** button.

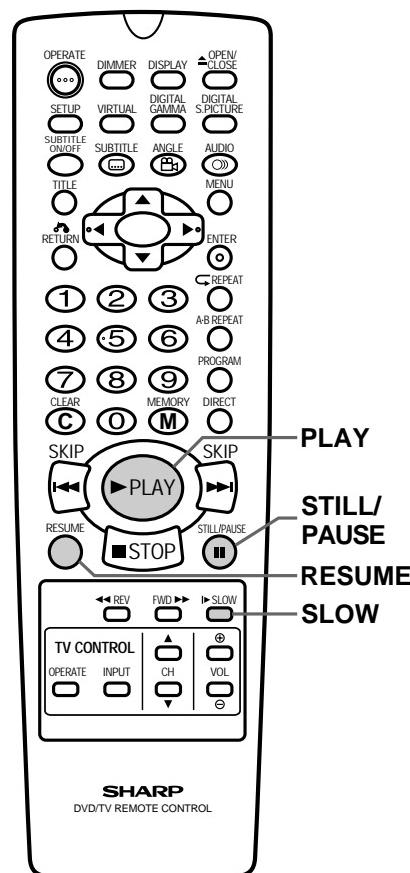
Resume Function

When you have stopped a disc during playback, the Resume function allows you to go back and start playing the disc at a point just prior to the scene in which it was stopped.

NOTE

- This function will not operate on some DVD discs.

12 After you have stopped playback while playing a disc, press the **RESUME** button on the remote control. Playback restarts from just prior to the point where it was stopped.



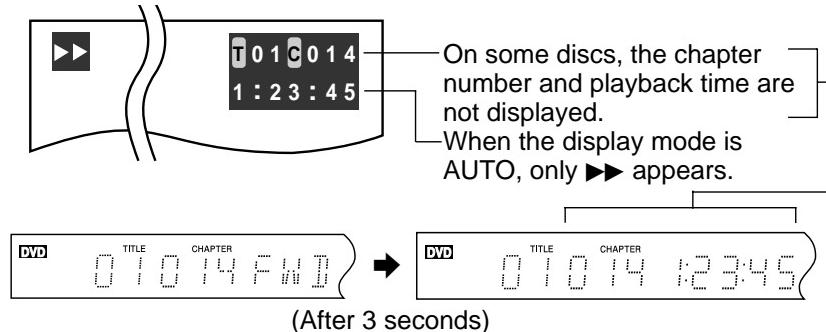


Fast Forward

- 1 If you press the **FWD▶▶** button on the remote control when a disc is playing, the image begins to fast forward at low speed.

NOTE

- On some discs, the fast forward playback is disabled.
- Audio and subtitles are not played back.



- 2 If you press the **FWD▶▶** button on the remote control when a disc is fast forwarding at low speed, the image begins to fast forward at high speed.
(Fast forwarding switches between high speed and low speed each time the **FWD▶▶** button is pressed.)

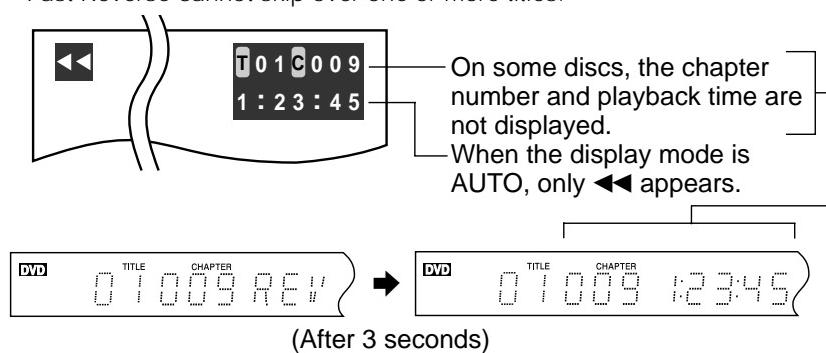
- 3 Press the **▶PLAY** button when you reach the desired chapter.

Fast Reverse

- 1 If you press the **◀REV** button on the remote control when a disc is playing, the image begins to run backwards at low speed.

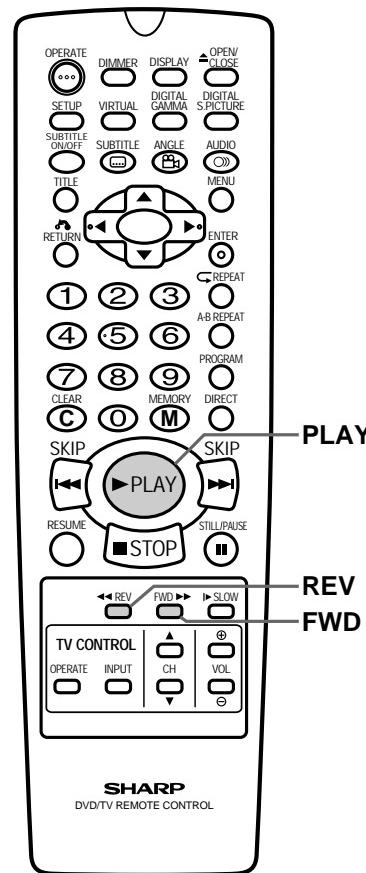
NOTE

- On some discs, the fast reverse function is disabled.
- Audio and subtitles are not played back.
- Fast Reverse cannot skip over one or more titles.



- 2 If you press the **◀REV** button on the remote control when a disc is running backwards at low speed, the image begins to run backwards at high speed.
(Fast reverse switches between high speed and low speed each time the **◀REV** button is pressed.)

- 3 Press the **▶PLAY** button when you reach the desired chapter.





Skip (Forward)

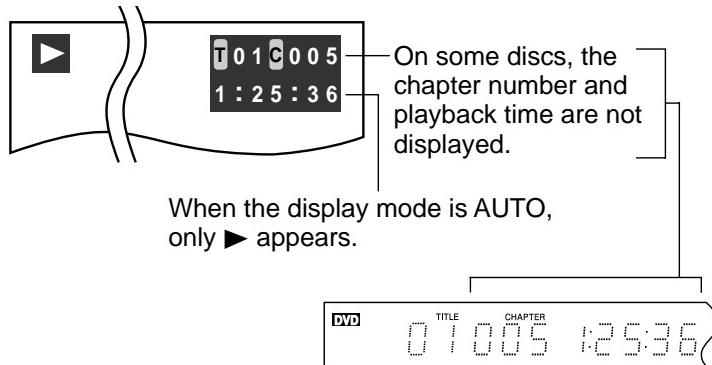
- Skip (Forward): While you are playing a disc, this function jumps forward to the beginning of the next chapter and automatically starts playing that chapter.

NOTE

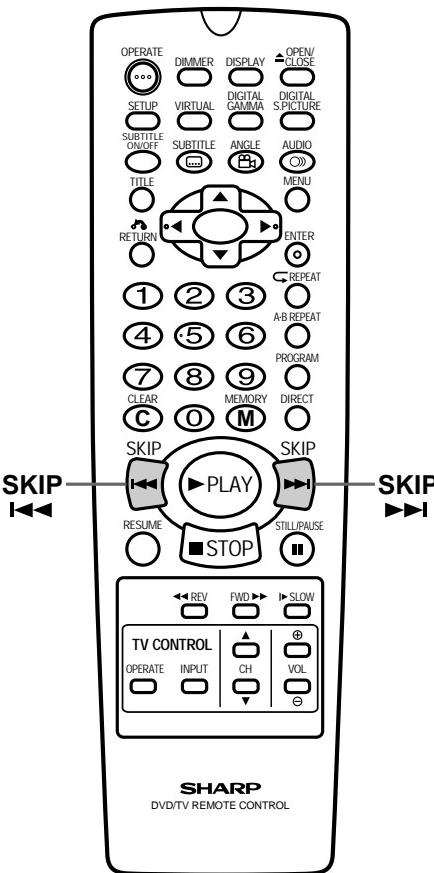
- On discs or titles that do not have chapter settings, playback skips forward to the next title.
- On some discs, the skip functions are disabled.
- Playback skips forwards one chapter for each time the **SKIP▶▶** button is pressed.

When the last chapter is reached, playback returns to the start of the disc.

- While a disc is playing, press the **SKIP▶▶** button.

**NOTE**

- Not displayed during the skip. Display resumes during playback following the skip



Skip (Reverse)

- Skip (Reverse): While you are playing a disc, this function jumps back to the beginning of the current chapter and automatically starts playing the chapter again.

NOTE

- On titles or discs that do not have chapter settings, playback skips back to the beginning of the current title or disc.
- On some discs, the skip functions are disabled.

- While a disc is playing, press the **◀◀SKIP** button.

- The TV screen and front panel displays for this function are the same as those for the Skip (Forward) function described above.

If you press the **◀◀SKIP** button and playback begins, and you then press the **◀◀SKIP** button again within 10 seconds, playback returns to the beginning of the previous chapter.



VCD (Video CD) and CD (Audio CD) Playback

Preparations:

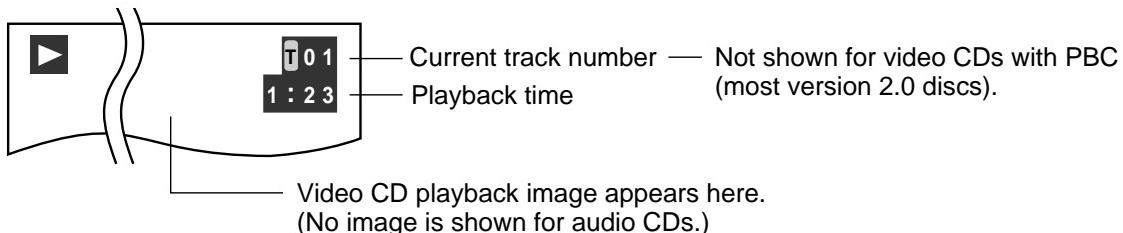
To prepare for playing DVD discs, perform steps 1 to 4 in "Basic Play" (page 29).

Playing Video CDs with Playback Control (PBC)

- Pressing the ► PLAY button begins PBC playback. Time display is not shown for some discs.
- If you specify the track number to be played (with playback stopped) and press the ► PLAY button, normal playback (not PBC playback) begins.

1 Press the ►PLAY button.

- Discs can also be played in Fast Forward and Fast Reverse modes.



(Video CD with PBC)

VCD	PBC	PLAY
-----	-----	------

 → After 3 seconds

VCD	PBC	123
-----	-----	-----

(Video CD without PBC)

VCD	TRACK	0 1	PLAY
-----	-------	-----	------

 → After 3 seconds

VCD	TRACK	0 1	123
-----	-------	-----	-----

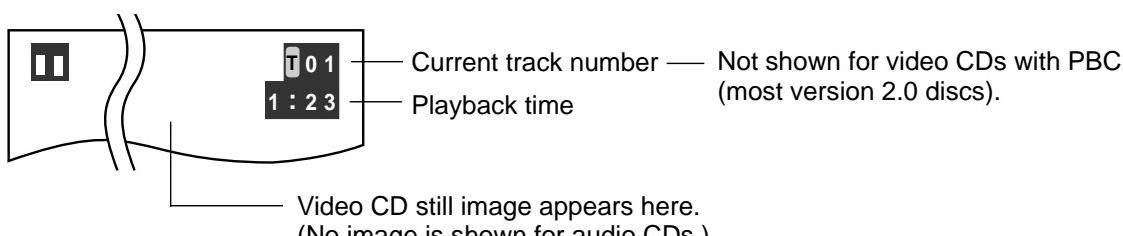
(Audio CD)

CD	TRACK	0 1	PLAY
----	-------	-----	------

 → After 3 seconds

CD	TRACK	0 1	123
----	-------	-----	-----

2 Press the II STILL/PAUSE button.



(Video CD with PBC)

VCD	PBC	STILL
-----	-----	-------

 After 3 seconds

VCD	PBC	123
-----	-----	-----

(Video CD without PBC)

VCD	TRACK	0 1	STILL
-----	-------	-----	-------

 → After 3 seconds

VCD	TRACK	0 1	123
-----	-------	-----	-----

(Audio CD)

CD	TRACK	0 1	PAUSE
----	-------	-----	-------

 → After 3 seconds

CD	TRACK	0 1	123
----	-------	-----	-----

NOTE

- Slow-motion playback does not function for video or audio CDs.
- Frame Advance Picture playback is disabled on the VCDs (Video CD).
- The image quality of video CDs is equivalent to that of video tape played on a VCR.

3 If you press the ►PLAY button while playback is paused (STILL/PAUSE), normal playback resumes.

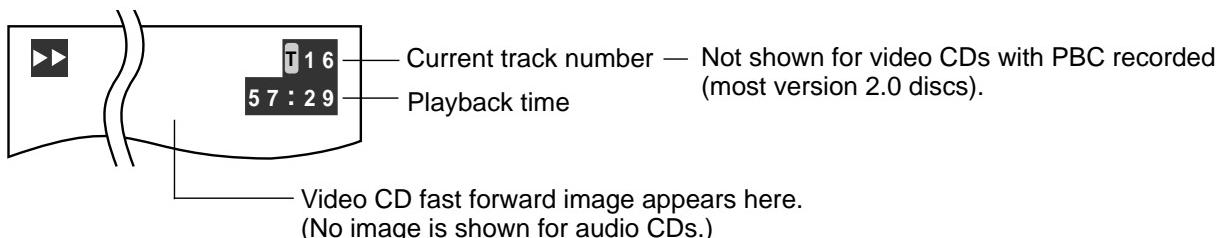


Fast Forward

NOTE

- Audio and subtitles are not played back (video CD).
- Audio is not played back (audio CD).

1 While a disc is playing, press the **FWD▶** button on the remote control.



(Video CD with PBC)

VCD	PBC	FWD
-----	-----	-----

 → After 3 seconds

VCD	PBC	5 7:29
-----	-----	--------

(Video CD without PBC)

VCD	TRACK	16	FWD
-----	-------	----	-----

 → After 3 seconds

VCD	TRACK	16	5 7:29
-----	-------	----	--------

(Audio CD)

CD	TRACK	16	FWD
----	-------	----	-----

 → After 3 seconds

CD	TRACK	16	5 7:29
----	-------	----	--------

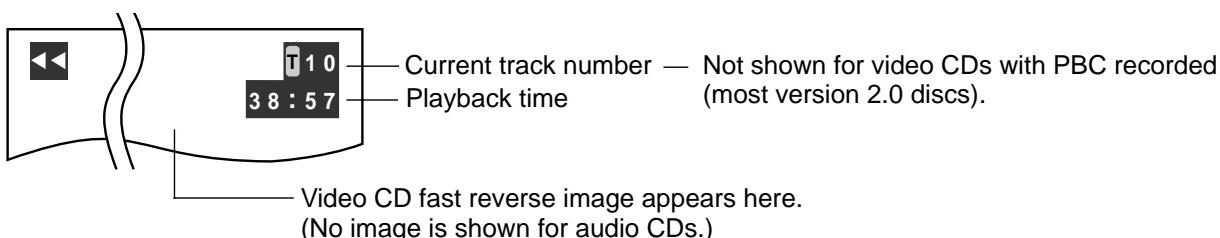
2 When you reach the desired track, press the **▶PLAY** button.

Fast Reverse

NOTE

- Audio and subtitles are not played back (video CD).
- Audio is not played back (audio CD).

1 While a disc is playing, press the **◀REV** button on the remote control.



(Video CD with PBC)

VCD	PBC	REV
-----	-----	-----

 → After 3 seconds

VCD	PBC	3 8:57
-----	-----	--------

(Video CD without PBC)

VCD	TRACK	10	REV
-----	-------	----	-----

 → After 3 seconds

VCD	TRACK	10	3 8:57
-----	-------	----	--------

(Audio CD)

CD	TRACK	10	REV
----	-------	----	-----

 → After 3 seconds

CD	TRACK	10	3 8:57
----	-------	----	--------

2 When you reach your desired track, press the **▶PLAY** button.



Skip (Forward)

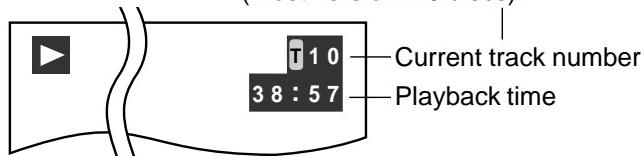
- Skip (forward): While you are playing a disc, this function jumps forward to the beginning of the next track and starts playing automatically.

NOTE

- Moves to the NEXT position when VCDs (video CDs) are played in PBC mode.

- While a disc is playing, press the **SKIP ►|** button.
- If there is only one track, or if you are playing the last track, playback returns to the start of the disc.

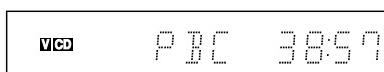
Not shown for video CDs with PBC recorded (most version 2.0 discs).



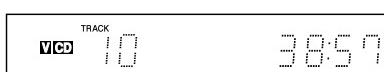
NOTE

- Not displayed during the skip. Display resumes during playback following the skip.

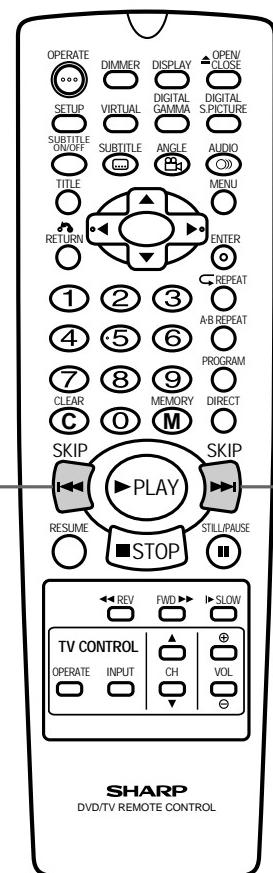
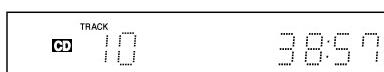
(Video CD with PBC)



(Video CD without PBC)



(Audio CD)



Skip (Reverse)

- Skip (reverse): While you are playing a disc, this function jumps reverse to the beginning of the current track and starts playing automatically.
- If you press the **|<<SKIP** button repeatedly, playback skips backwards one track for each time the button is pressed.

NOTE

- Moves to the PREVIOUS position when VCDs (video CDs) are played in PBC mode.

- While the disc is playing, press the **|<<SKIP** button.

- The TV screen and front panel displays for this function are the same as those for the Skip (forward) function described above.

Continuing Playback from where you stopped (Continued Playback)

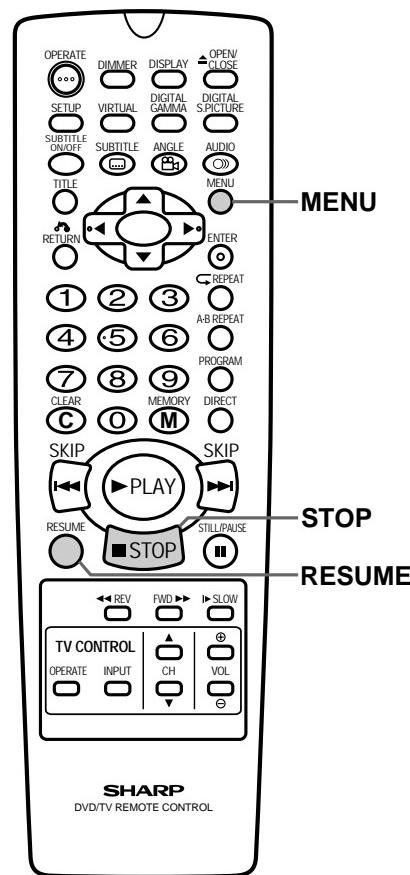
- This function operates for audio CDs, video CDs and DVD discs.

1 Press the ■ STOP button to stop playback at the desired point.
• Leave the disc in the DVD player.
• The DVD player automatically stores the location at which the disc stopped.

2 Press the RESUME button on the remote control.
• Playback resumes from a point just before the location stored in step 1.

NOTE

- This function cannot be used during PBC playback of a video CD with PBC.
- The continued playback described here may not be possible on some discs (such as discs that automatically start playing when the disc tray closes).
- Once you have stopped the disc as described in step 1, if you then switch to the SET UP screen, press the MENU button on the remote control or eject the disc, continued playback will not work.



Using Headphone

Preparation:

- When you are using headphones, always set the SPEAKER setting in SET UP to "2ch/DIGITAL".

You can use headphones to listen to the sound.

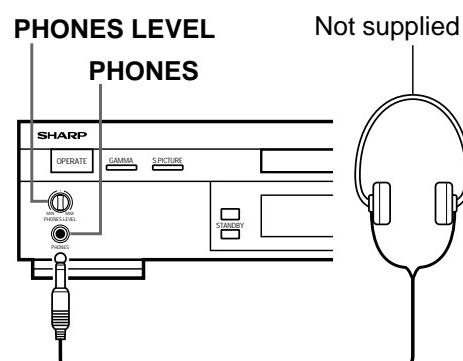
1 Plug the headphones into the PHONES jack on the DVD player.
2 Use the PHONES LEVEL knob on the DVD player to control the headphones volume.

NOTE

- Be sure that your headphones have a 6.5mm diameter plug.
- When headphones are connected to the headphones jack while listening to sound with the 5.1-channel system, the sound output from the audio output terminals changes to that of 2-channel (stereo).

Caution:

Avoid listening to sound at levels which may be harmful to your ears.



Direct Selection of Scenes

DVD Discs

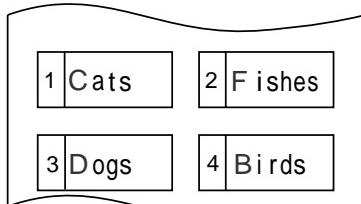
Selecting Scenes by Title Number (DVD)

NOTE

- This function only operates on DVD discs that have a title screen.

(Example) Viewing title "2"

- 1 Press the **TITLE** button on the remote control to show the title screen.



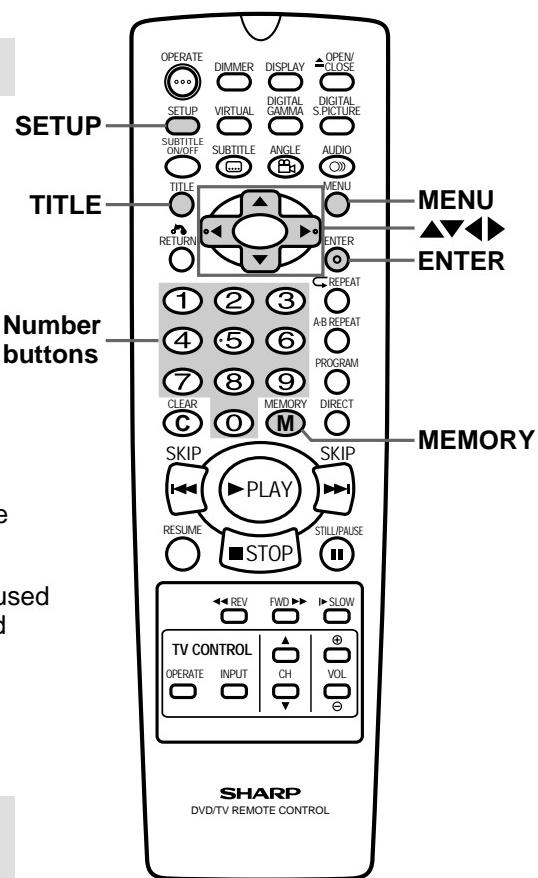
(Example: EN (English) is selected in DISC MENU LANGUAGE setting on page 24 or on this page below.)

- 2 Use the cursor controls  or the number buttons (**0** to **9**) on the remote control to enter a 2 in the . (2)



When a number button (**0** to **9**) is used to make the selection, the selected number appears in a box.

- 3 When you press the **MEMORY** or **ENTER** button on the remote control, title 2 starts playing.



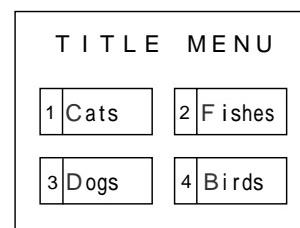
Moving from the Menu Screen to the Titles/ Changing the Menu Language (DVD)

NOTE

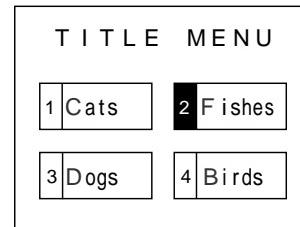
- This function only operates on DVD discs that have a menu screen.

- 1 Press the **MENU** button on the remote control to show the menu screen.

(Example: EN (English) is selected in DISC MENU LANGUAGE setting on page 24 or in step 3 below.)



- 2 Use the cursor controls  or the number buttons (**0** to **9**) on the remote control to highlight the desired title. (Title 2 selected.)



- 3 Each time you press the **SETUP** button on the remote control, the menu text switches to the next language provided on the DVD disc. Press the **ENTER** button to set a language while a language code is displayed. Please refer to "Language Code List on Menu Screen" on page 53.

NOTE

- Languages not provided on the disc are not displayed.

(Example)



Languages are indicated by two-letter codes.
(EN (English) selected.)

4 When you press the **MEMORY** or **ENTER** button on the remote control, title 2 starts playing.



Direct Skip Function (DVD) (VCD, CD)

This function allows you to skip directly to the beginning of any title (track) or chapter while a disc is playing.

- Press the **MEMORY** button on the remote control or the **▶PLAY** button within 10 seconds of pressing a number to select your title, chapter or track. Once 10 seconds has passed, your selection is automatically cancelled.

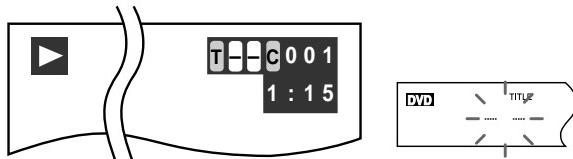
NOTE

- The Title Direct Skip function does not operate on discs on which no titles are recorded.
- On some discs, the Direct Skip function is disabled.

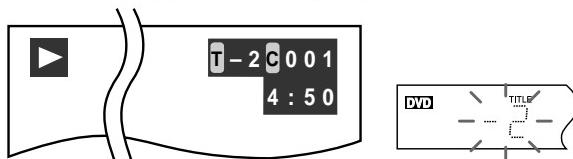
DVD Discs

Title Direct Skip

- 1 While a disc is playing, press the **DIRECT** button on the remote control.



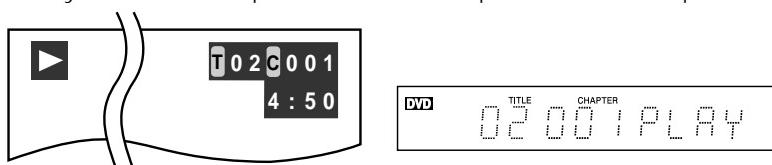
- 2 Using the number buttons (**0** to **9**) on the remote control, enter a title number. (If you enter two or more digits, the last two digits are displayed.)



- 3 Pressing the **MEMORY** button on the remote control or the **▶PLAY** button confirms the selected title number and the player skips to title 2 and begins playing the title.

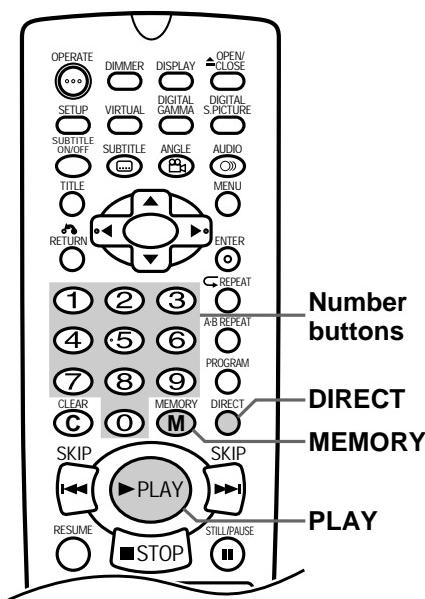
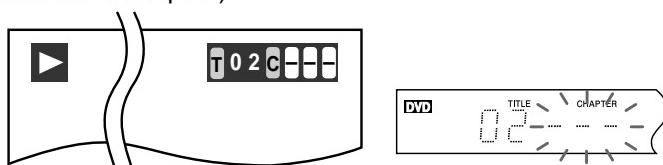
NOTE

- If the entered title number does not exist on the disc, the number is ignored when the **MEMORY** or **▶PLAY** button is pressed.
- Only Title Direct Skip is available in Stop mode. The Chapter Direct Skip function cannot be used.



Chapter Direct Skip

- 4 While a disc is playing, press the **DIRECT** button on the remote control twice. (Press once for a title and twice for a chapter.)

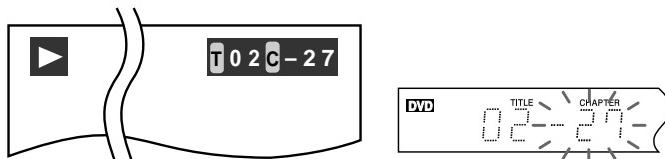




Direct Selection of Scenes

- 5 Using the number buttons (0 to 9) on the remote control, enter the desired chapter number. (If you enter three or more digits, the last three digits are displayed.)

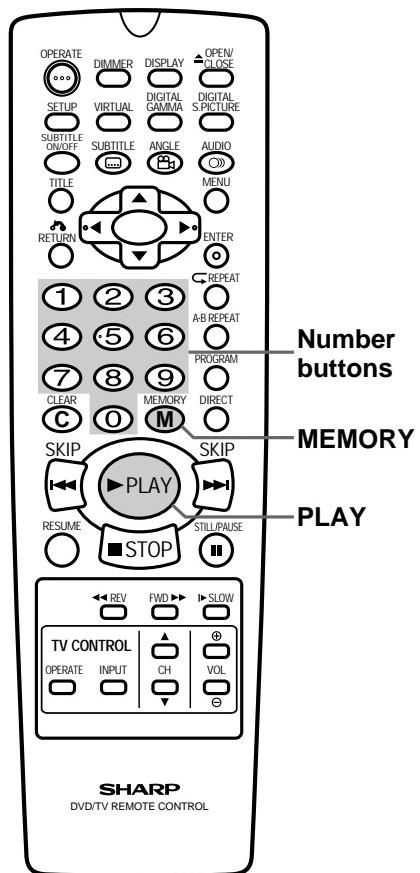
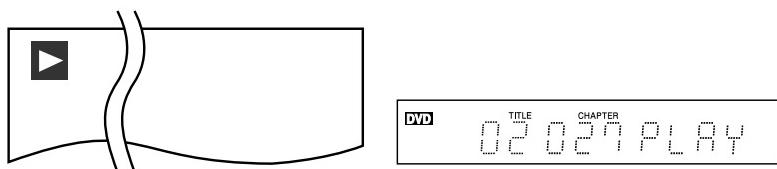
(Example) Entering chapter 27.



- 6 Pressing the **MEMORY** button on the remote control or the **▶PLAY** button confirms the selected chapter number and the player skips to chapter 27 and begins playing the chapter.

NOTE

- If the entered chapter number does not exist on the disc, the number is ignored when the **MEMORY** or **▶PLAY** button is pressed.



VCD (video CDs) and CD (audio CDs)

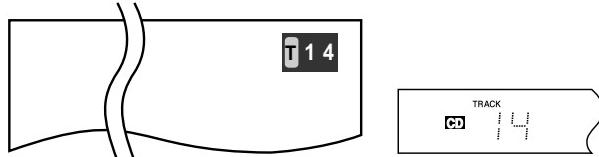
Track Direct Skip

- 1 While a disc is playing or is stopped, enter the desired track number using the number buttons (0 to 9) on the remote control. (If you enter two or more digits, the last two digits are displayed.)

NOTE

- This function does not operate during PBC playback of a video CD. Use the function while disc playback is stopped.

(Example) Entering track 14.



- 2 Pressing the **MEMORY** button on the remote control or the **▶PLAY** button confirms the selected track number and the player skips to track 14 and begins playing the track.

NOTE

- If the entered track number does not exist on the disc, the number is ignored when the **MEMORY** or **▶PLAY** button is pressed.

Programmed Playback

The three types of programmed playback provided by this DVD player are title programmed playback (DVD discs), chapter programmed playback (DVD discs) and track programmed playback (VCD/CD discs).

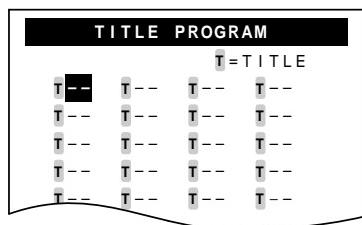
NOTE

- On some discs, the programmed playback is disabled.

DVD Discs

Title Programmed Playback (DVD)

- 1 Press the **PROGRAM** button on the remote control while the disc is stopped. The title program settings screen appears.

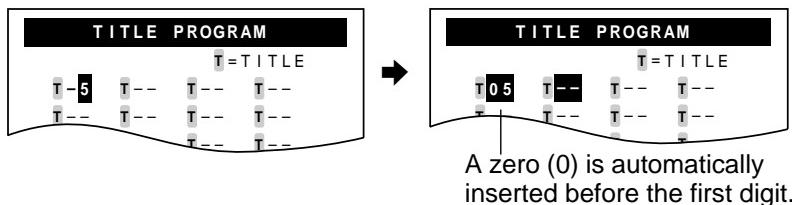


- 2 Use the number buttons (0 to 9) on the remote control to enter the title number in **--** and then press the **MEMORY** button. (The highlight moves to the right (next field).)

NOTE

- If the entered title number does not exist on the disc, the number is ignored when the **MEMORY** button is pressed. Press the **CLEAR** button to clear.

(Example) Title 5 entered.



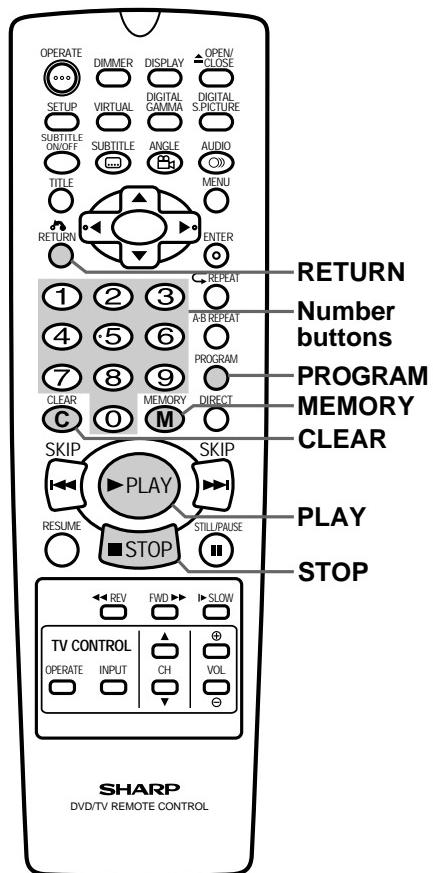
- 3 Repeat step 2 for each of the titles that you want to play as part of the program.

- If you enter two or more digits, only the last two digits are displayed.
- If you press the **CLEAR** button while you are entering a title number, the number entered reverts to **--**.
- If you press the **CLEAR** button when the DVD player is awaiting input (cursor in **--**), the cursor highlight returns to the previous location.
- If you hold down the **CLEAR** button for 2 seconds or longer while you are entering numbers, all the entered numbers are erased and the highlight returns to the initial (top left) position.
- Up to 20 titles can be programmed.
- To stop title program screen, press the **RETURN** on the remote control or **STOP** button.

- 4 Press the **PLAY** button to begin playing the programmed titles. (Press this button when the program settings screen appears.)



- 5 Press the **STOP** button to stop programmed playback.



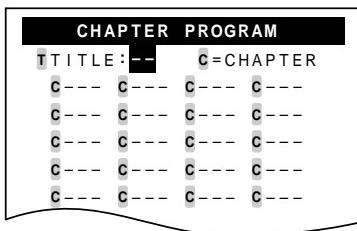


DVD Discs

Chapter Programmed Playback (DVD)

- 1 Press the **PROGRAM** button on the remote control twice while the disc is stopped. (Press once for a title and twice for a chapter.)

The chapter program settings screen appears.



- 2 First, use the number buttons (**0** to **9**) to specify the desired title number and then press the **MEMORY** button on the remote control.
- 3 Use the number buttons (**0** to **9**) on the remote control to enter the chapter number in **---** and then press the **MEMORY** button. (The highlight moves to the right (next field).)

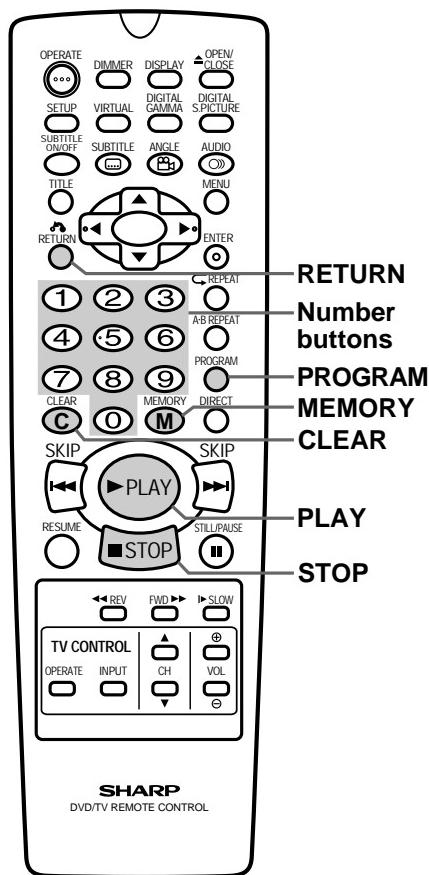
NOTE

- If the entered chapter number does not exist on the disc, the number is ignored when the **MEMORY** button is pressed. Press the **CLEAR** button to clear.

(Example) Chapter 35 entered.

A zero (0) or double-zero (00)
is automatically inserted
(**0** **3** **5** **0**) → (**0****0****3** **5** **0****--**) before the first or second digit.

- 4 Repeat step 3 for each of the chapters that you want to play as part of the program.
- If you enter three or more digits, only the last three digits are displayed.
 - If you press the **CLEAR** button while you are entering a chapter number, the number entered reverts to **---**.
 - If you press the **CLEAR** button when the DVD player is awaiting input (cursor in **---**), the cursor highlight returns to the previous location.
 - If you hold down the **CLEAR** button for 2 seconds or longer while you are entering numbers, all the entered numbers are erased and the highlight returns to the initial (top left) position.
 - Up to 20 chapters can be programmed.
 - To stop chapter program screen, press the **RETURN** on the remote control or **STOP** button.
- 5 Press the **PLAY** button to begin playing the programmed chapters. (Press this button when the program settings screen appears.)
- 6 Press the **STOP** button to stop programmed playback.

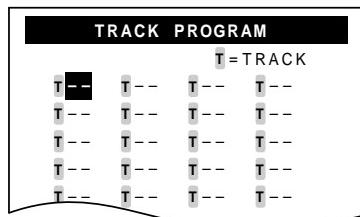




VCD (video CDs) and CD (audio CDs)

Track Programmed Playback (VCD, CD)

- 1 Press the **PROGRAM** button on the remote control while the disc is stopped. The track program settings screen appears.



- 2 Use the number buttons (**0** to **9**) on the remote control to enter the track number in **--** and then press the **MEMORY** button on the remote control. (The highlight moves to the right (next field).)

NOTE

- If the entered track number does not exist on the disc, the number is ignored when the **MEMORY** button is pressed. Press the **CLEAR** button to clear.

(Example) Track 7 entered.

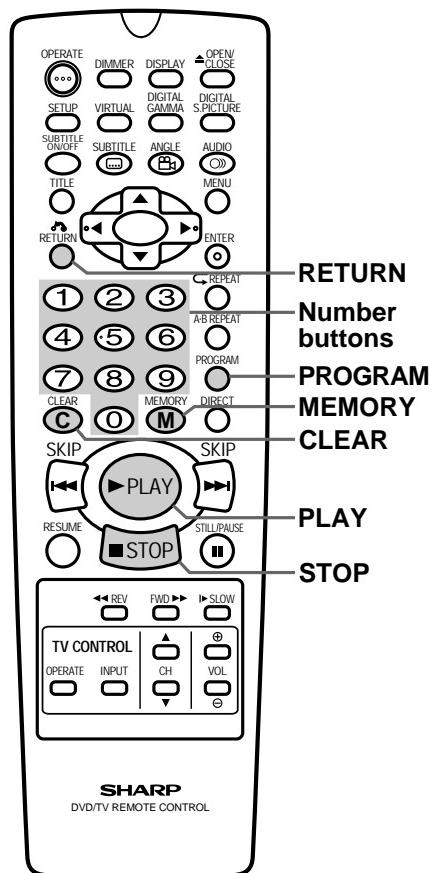
(**T** **7**) → (**T** **0** **7** **--**) A zero (0) is automatically inserted before the first digit.

- 3 Repeat step 2 for each of the tracks that you want to play as part of the program.

- If you enter two or more digits, only the last two digits are displayed.
- If you press the **CLEAR** button while you are entering a track number, the number entered reverts to **--**.
- If you press the **CLEAR** button when the DVD player is awaiting input (cursor in **--**), the cursor highlight returns to the previous location.
- If you hold down the **CLEAR** button for 2 seconds or longer while you are entering numbers, all the entered numbers are erased and the highlight returns to the initial (top left) position.
- Up to 20 tracks can be programmed.
- To stop track program screen, press the **RETURN** on the remote control or **STOP**.

- 4 Press the **PLAY** button to begin playing the programmed tracks. (Press this button when the program settings screen appears.)

- 5 Press the **STOP** button to stop programmed playback.



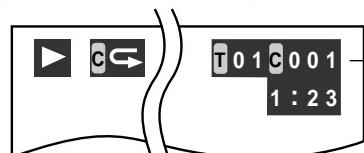
Repeat Playback

Repeat playback is disabled on some discs.

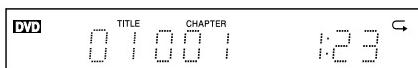
DVD Discs

Chapter Repeat (DVD)

- 1 If you press the  REPEAT button on the remote control while a disc is playing, the current chapter is played repeatedly.
(On discs without chapters, the player repeats the current title.)



When the display is set to "AUTO", this display does not appear.



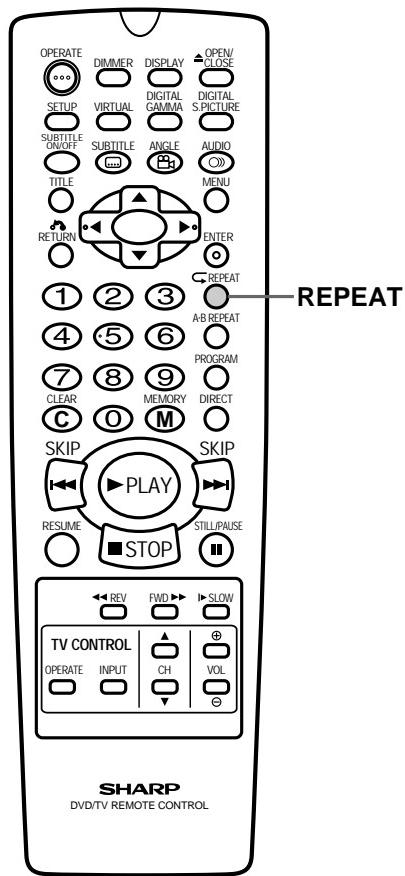
Title Repeat (DVD)

- 2 If you press the  REPEAT button on the remote control during chapter repeat playback, the current title is played repeatedly.
-  appears on the TV screen during title repeat.
 - The front panel displays are the same as for chapter repeat playback.

Repeat Off

- 3 If you press the  REPEAT button on the remote control during title repeat playback, repeat playback ends and normal playback resumes.
- The TV screen and front panel displays are the same as for normal playback.

The diagram below shows the function selected each time the  REPEAT button on the remote control is pressed.



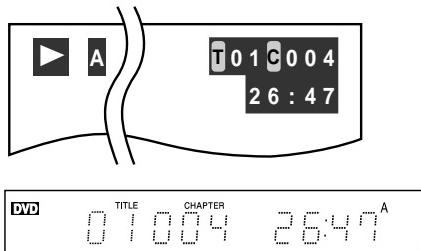


DVD Discs

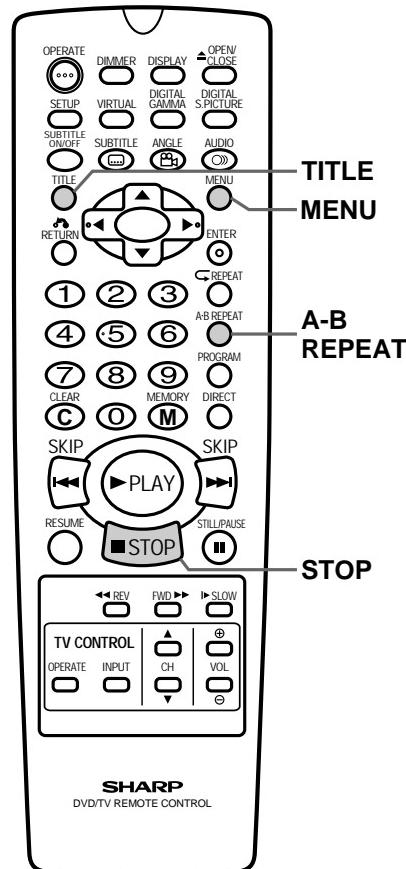
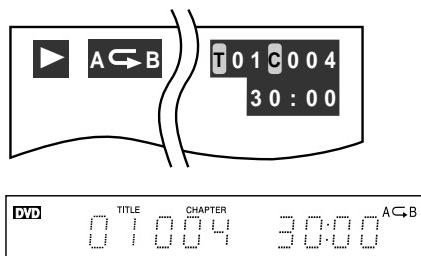
A-B Repeat (DVD)

- A-B repeat: Repeats any specified section on the disc.

- 1 While you are playing a disc, press the **A-B REPEAT** button on the remote control when you reach the start of the section to be repeated.



- 2 While the disc is playing the same title (same chapter), press the **A-B REPEAT** button on the remote control again when you reach the end of the section to be repeated.



NOTE

- A-B repeat can only be used within the same title. (On some discs, A-B repeat is restricted to the same chapter.)
If the start and end of the section to be repeated are in different titles (chapter), A-B repeat is cancelled.
- If the front panel display does not show the elapsed playback time while a DVD disc is playing, A-B repeat playback cannot be used for that DVD disc.
- The A-B Repeat function does not operate in scenes where different camera angles are recorded.

The A-B repeat function does not operate for VCDs (video CDs) or CDs (audio CDs).

- To cancel A-B repeat, press the **A-B REPEAT** button again during A-B repeat playback or press the **■ STOP** button. You can also cancel A-B repeat by pressing the **TITLE** or **MENU** button.



Repeat Playback

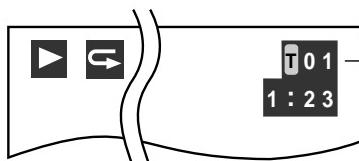
VCD (video CDs) and CD (audio CDs)

NOTE

- The Disc Repeat function cannot be used on video CDs with PBC mode playback (most version 2.0 discs).

Disc Repeat (VCD, CD)

- If you press the  REPEAT button on the remote control while a disc is playing, the disc currently playing is played repeatedly.



When the display is set to "AUTO", this display does not appear.



Repeat Off

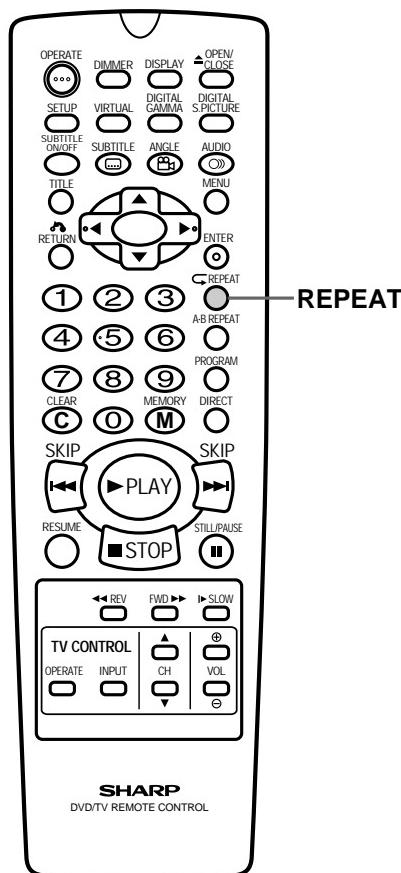
- If you press the  REPEAT button on the remote control during disc repeat playback, repeat playback ends and normal playback resumes.
 - The TV screen and front panel displays are the same as for normal playback.

The diagram below shows the function selected each time the  REPEAT button on the remote control is pressed.



NOTE

- Track repeat cannot be used on VCDs (video CDs) or CDs (audio CDs). Use the Programmed Playback function instead. (See Page 43)



Angle Selection (DVD only)

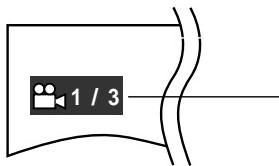
NOTE

- This function can only be used for discs on which scenes shot from multiple angles have been recorded.
- Some DVD discs contain scenes which have been shot simultaneously from a number of different angles. For these discs, the same scene can be viewed from each of these different angles using the **ANGLE** button. (The recorded angles differ depending on the disc used.)
- Titles that have been shot from different angles are indicated by an **ANGLE** indicator next to the title on the front panel display.

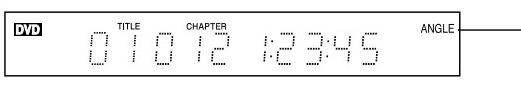
- While you are playing a DVD disc with different angles recorded, press the **ANGLE** button on the remote control to view the number of the current angle.
- When you press the **ANGLE** button or the **▲** or **▼** button in , the scene changes to the next angle in those recorded, and playback continues from the new angle.

NOTE

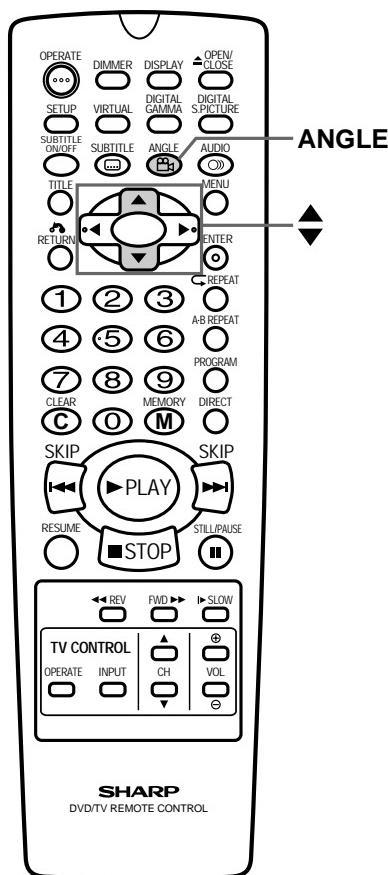
- If only one angle is recorded, the angle mark  does not appear.
- If the button is not pressed after 10 seconds, the indicator goes off.



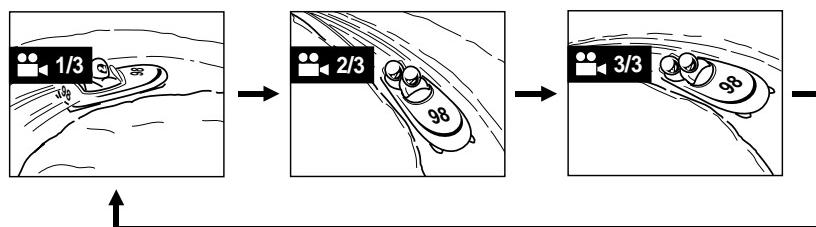
Number changes to show the number of recorded angles (1/3→2/3→3/3→... etc.). (The maximum number stipulated by the manufacturers is 9/9.)



Lights when different angles are recorded for the title currently playing.



Sequence of angle shots (Example)



Subtitle Selection (DVD only)

SUBTITLE ON/OFF switch

- Display of subtitles is limited to software on which DVD disc subtitles are recorded.
- Also, even if you are playing back a DVD disc on which subtitles are recorded, the subtitles are not displayed when you set the **SUBTITLE ON/OFF** button to the OFF mode.

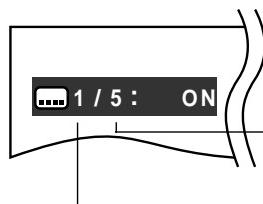
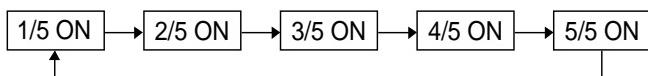
NOTE

- This function can only be used for discs on which subtitles have been recorded in multiple languages.

With SUBTITLE ON

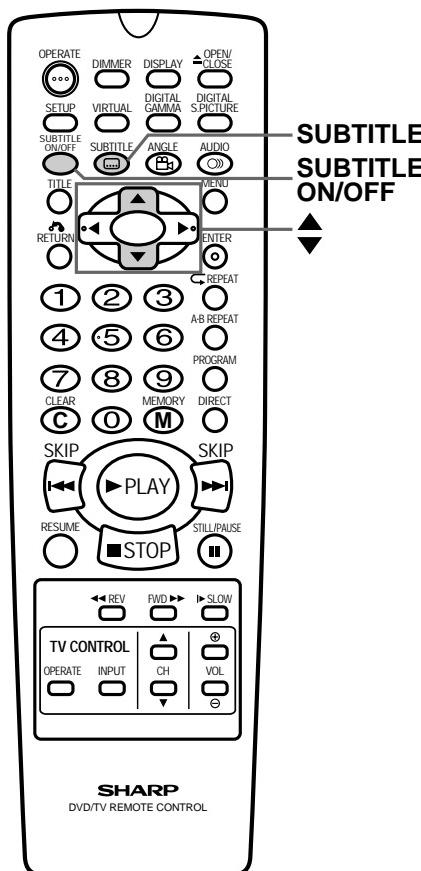
If you press the **SUBTITLE** button on the remote control while a DVD disc is playing, the current language setting is displayed, as shown in the example below.

(Example)



Total number of subtitle languages
Number of the subtitle language currently playing

If no button is pressed within 10 seconds, the indicator goes off.



With SUBTITLE OFF

If you press the **SUBTITLE** button on the remote control while a DVD disc is playing, the current language setting is displayed, as shown in the example below.

(Example)



- The selected language changes each time you press the **SUBTITLE** button, as shown above.
- When **SUBTITLE** displays a fraction (eg. 1/5 ON), the **▲** or **▼** button in  can also be used to select the language.
- Some DVD discs are marked "Forced Display", indicating that the subtitling cannot be suppressed. With such discs, the subtitles will be displayed even when you select " OFF" display. This does not indicate a fault with your player.
- If no subtitles are recorded on the disc,  xx is displayed.
- The maximum number of subtitle languages stipulated by the manufacturers is 32/32.

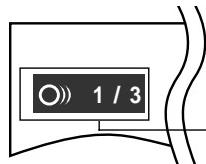
Audio Selection

DVD Discs

- This function can only be used for discs on which the sound has been recorded in multiple formats.
- On some discs, the sound is recorded in both Dolby Digital (5ch or 5.1ch) and Linear PCM. Use the procedure below to select the type of playback.

1 While a disc is playing, press the **AUDIO** button on the remote control to show the current audio format number.

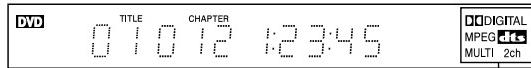
- While the audio format number is displayed, press the **AUDIO** button (or the \blacktriangle or \blacktriangledown button in ) to switch to the next audio format number in the sequence of audio formats recorded on the disc. Playback then continues in the new audio format.



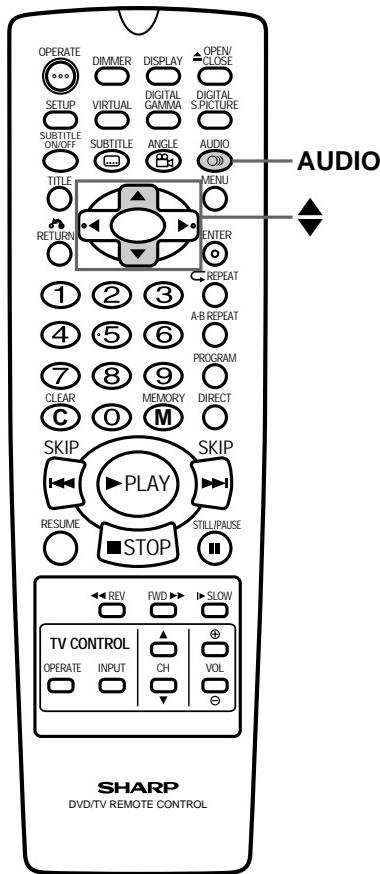
If no button is pressed within 10 seconds, the indicator goes off.

Recorded audio format number changes sequentially.

- If only one audio format is recorded, the number does not change.
(The maximum number of audio formats stipulated by the manufacturers is 8/8.)



Lights when Dolby Digital sound, MPEG, DTS, MULTI or 2ch is used. (Does not light for LPCM.)

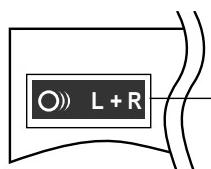
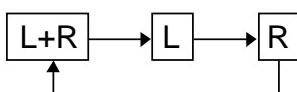


Video CDs and Audio CDs

Three types of playback are available for VCD discs and CD discs.

1 While a disc is playing, press the **AUDIO** button on the remote control to show the current playback type.

- Press the **AUDIO** button to change the type of Audio playback. The Audio playback changes as follows:



If no button is pressed within 10 seconds, the indicator goes off.

NOTE

- For DTS CD playback, audio mode should be set to "L+R". The Digital Out signal can not be output correctly if audio mode is set to "L" or "R".



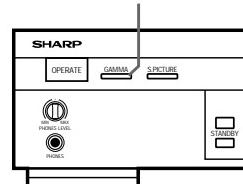
New Digital Gamma Selection (DVD, VCD)

- “Adaptive digital gamma” is the digital function for high picture quality which keeps the bright part of picture as it is during AUTO mode, and which automatically detects and compensates for dark and difficult-to-see parts, making them brighter and easy to see, richly reproducing the original high picture quality provided by DVD. Also, in the ON mode, you can set this function to the desired level manually.
- Digital gamma is a digital image quality enhancement function that gives a richer image by brightening the darker and more obscure portions of the image without altering the brightness of the brighter portions, thereby making the entire image easier to see.
- Four digital gamma settings are available to allow for differences in the images played and in the brightness of the room.
- When you are watching a recording with frequent dark scenes, such as a film or concert, or when you are watching a recording in bright room, this feature makes the darker scenes easier to see and gives the impression of greater depth in the image.

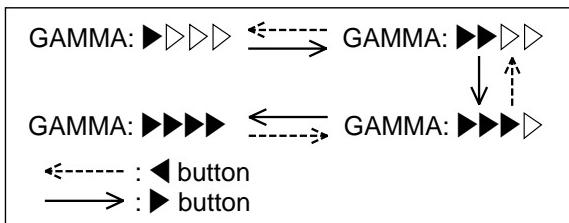
- 1** Each time you press the **DIGITAL GAMMA** button, the screen changes as shown below.
(The Digital gamma mode is set to AUTO at the factory.)

GAMMA: AUTO → GAMMA: ON → GAMMA: OFF

Lights when ON or AUTO is selected.

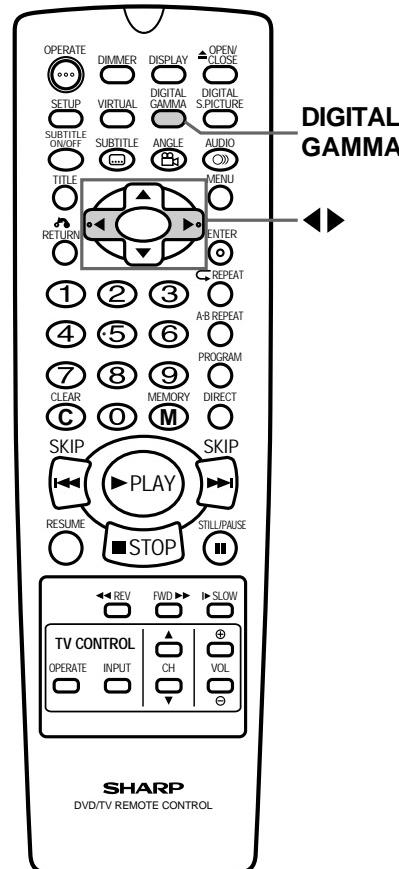


- 2** If you press the **◀** or **▶** button in once when the GAMMA: ON screen is displayed, the level selection indicator appears (eg. GAMMA: **▶▶▶▶**). When this level selection indicator is displayed, you can use the **◀** or **▶** button in to change the level.



- If no change is made for 10 seconds after the level is set, the level indicator goes off.

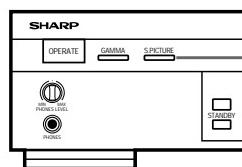
- ▶▶▶▶: Brightest level
- Select the desired level.
- If no button is pressed for 10 seconds, the gamma level indicator goes off.





New Digital Super Picture Selection (DVD, VCD)

- DIGITAL S.PICTURE is a digital image quality enhancement function that gives a clearer image by sharpening the details and outlines in the image and reducing the amount of picture noise. The DIGITAL S.PICTURE setting can be varied as desired.
- To see more detail in very intricate images, set this setting to **SP>>>**.
- To reduce visual noise and obtain a clearer picture when you are viewing recordings such as old movies, set this setting to **<<<NR**.

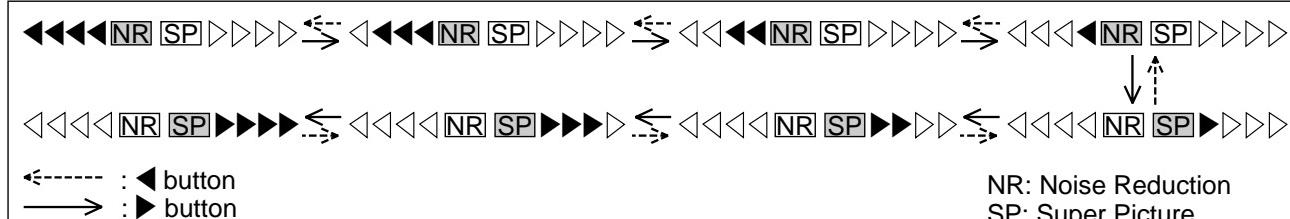
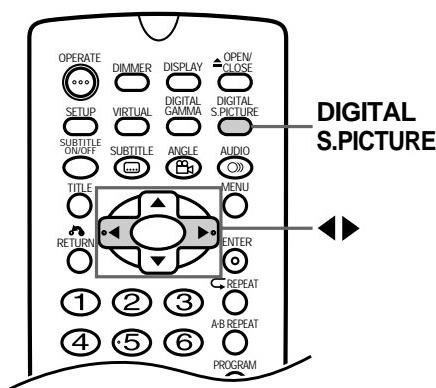


Lights when ON is selected.

- Each time you press the **DIGITAL S.PICTURE** button, the screen changes as shown below.
(The Digital Super Picture mode is set to ON at the factory.)

S.PICTURE: ON → S.PICTURE: OFF
↑

- If you press the **◀** or **▶** button in once when the S.PICTURE: ON screen is displayed, the level selection indicator appears (eg. S.PICTURE: <<<NR SP>>>>). When this level selection indicator is displayed, you can use the **◀** or **▶** button in to change the level.



- If no change is made for 10 seconds after the level is set, the level indicator goes off.

- <<<NR SP>>>>:
Strongest level
- Select the desired level.
- If no button is pressed for 10 seconds, the level indicator goes off.





VIRTUAL Surround (Audio) Selection (DVD only)

- This function allows you to enjoy a "surround sound" effect when you are using an analogue connection (using AUDIO OUT "FRONT" on the DVD player) to 2-channel audio equipment (TV, etc.).
- Virtual Surround operates when you are playing DVD discs recorded in Dolby Digital sound or Dolby Pro Logic sound.

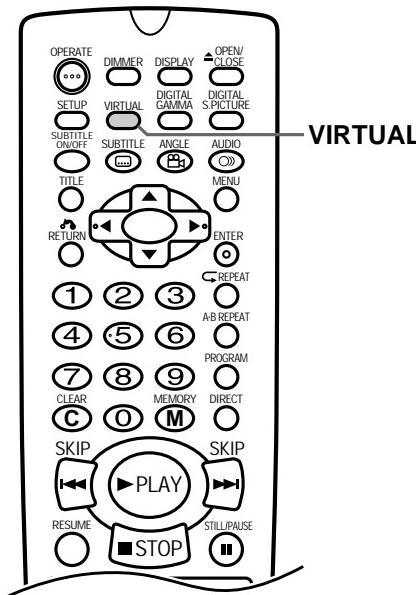
Preparations:

- When you use the Virtual Surround function, set the SPEAKER setting in SET UP to "2ch/DIGITAL".

NOTE

- These functions do not operate for VCDs or CDs.
- Virtual Surround cannot be used with linear PCM sound.

- While a disc is playing, press the **VIRTUAL** button on the remote control. Then take the appropriate steps below for your speaker setup (2ch/DIGITAL, 5ch or 5.1ch) in "SET UP" (see page 20) and the audio modes recorded on the disc.



SET UP speaker settings	Dolby Digital	Dolby Pro Logic	Dolby Digital 2ch/Linear PCM	MPEG Audio Ver. 2.0/DTS
The speaker mode is set to 2ch/DIGITAL in SET UP.	○	○	✗	✗

- Virtual surround does not operate when you set the SPEAKER Setting in SET UP to "5ch" or "5.1ch".
- Virtual Surround does not operate when you are using a Digital connection.
- If the speaker mode is set to "2ch/DIGITAL" in SET UP, the setting switches between "2ch (down mix)" and "Virtual ON" depending on the audio modes recorded on the disc ("Dolby Digital" and "Pro Logic").
- When VIRTUAL is ON, "VIRTUAL" lights on the front panel display.
- When PRO LOGIC is ON, "PRO LOGIC" lights on the front panel display.



Language Code List on Menu Screen

Code	Language Name	Code	Language Name	Code	Language Name	Code	Language Name
AA	Afar	FY	Frisian	MG	Malagasy	SL	Slovenian
AB	Abkhazian	GA	Irish	MI	Maori	SM	Samoan
AF	Afrikaans	GB	Scots Gaelic	MK	Macedonian	SN	Shona
AM	Ameharic	GL	Galician	ML	Malayalam	SO	Somali
AR	Arabic	GN	Guarani	MN	Mongolian	SQ	Albanian
AS	Assamese	GU	Gujarati	MO	Moldavian	SR	Serbian
AY	Aymara	HA	Hausa	MR	Marathi	SS	Siswat
AZ	Azerbaijani	HI	Hindi	MS	Malay	ST	Sesotho
BA	Bashkir	HR	Croatian	MT	Maltese	SU	Sundanese
BE	Byelorussian	HU	Hungarian	MY	Burmese	SV	Swedish
BG	Bulgarian	HY	Armenian	NA	Nauru	SW	Swahili
BH	Bihari	IA	Interlingua	NE	Nepali	TA	Tamil
BI	Bislama	IE	Interlingue	NL	Dutch	TE	Telugu
BN	Bengali;	IK	Inupiak	NO	Norwegian	TG	Tajik
	Bangla	IN	Indonesian	OC	Occitan	TH	Thai
BO	Tibetan	IS	Icelandic	OM	(Afan) Oromo	TI	Tigrinya
BR	Breton	IT	Italian	OR	Oriya	TK	Turkmen
CA	Catalan	IW	Hebrew	PA	Punjabi	TL	Tagalog
CO	Corsican	JA	Japanese	PL	Polish	TN	Setswana
CS	Czech	JI	Yiddish	PS	Pashto, Pushto	TO	Tonga
CY	Welsh	JW	Javanese	PT	Portuguese	TR	Turkish
DA	Danish	KA	Georgian	QU	Quechua	TS	Tsonga
DE	German	KK	Kazakh	RM	Rhaeto-	TT	Tatar
DZ	Bhutani	KL	Greenlandic		Romance	TW	Twi
EL	Greek	KM	Cambodian	RN	Kirundi	UK	Ukrainian
EN	English	KN	Kannada	RO	Romanian	UR	Urdu
EO	Esperanto	KO	Korean	RU	Russian	UZ	Uzbek
ES	Spanish	KS	Kashmiri	RW	Kinyarwanda	VI	Vietnamese
ET	Estonian	KU	Kurdish	SA	Sanskrit	VO	Volapük
EU	Basque	KY	Kirghiz	SD	Sindhi	WO	Wolof
FA	Persian	LA	Latin	SG	Sangho	XH	Xhosa
FI	Finnish	LN	Lingala	SH	Serbo-	YO	Yoruba
FJ	Fiji	LO	Laothian		Croatian	ZH	Chinese
FO	Faroese	LT	Lithuanian	SI	Sinhalese	ZU	Zulu
FR	French	LV	Latvian, Lettish	SK	Slovak		

OTHERS



Definition of Terms

Angle:

Recorded onto some DVD discs are scenes which have been simultaneously shot from a number of different angles (the same scene is shot from the front, from the left side, from the right side, etc.). With such discs, the **ANGLE** button can be used to view the scene from different angles.

Chapter Number: These numbers are recorded on DVD discs. A title is subdivided into many sections, each of which is numbered, and specific parts of video presentations can be searched quickly using these numbers.

DTS:

This is a digital sound system developed by Digital Theater Systems for use in cinemas. This system uses 6 audio channels and provides accurate sound field positioning and realistic acoustics. (By connecting a DTS Digital Surround decoder, you can also listen to DTS Digital Surround sound.)

DVD:

This refers to a high-density optical disc on which high-quality pictures and sound have been recorded by means of digital signals. Incorporating a new video compression technology (MPEG II) and high-density recording technology, DVD enables esthetically pleasing full-motion video to be recorded over long periods of time (for instance, a whole movie can be recorded).

DVD has a structure consisting of two 0.6 mm thin discs which are adhered to each other. Due to higher data density dual layer and possibility of double sided operation, the DVD disc has a much greater capacity than the single sided 1.2 mm thick disc (CD). Since the two thin discs are adhered to each other, there is the potential to achieve double-sided play sometime in the future for even longer duration play.

Linear PCM Sound: Linear PCM is a signal recording format used for audio CDs.

The sound on audio CDs is recorded at 44.1kHz with 16 bits. (On DVD discs, sound is recorded at between 48kHz with 16 bits and 96kHz with 24 bits.)

Playback Control (PBC): This is recorded on a video CD (version 2.0). The scenes or information to be viewed (or listened to) can be selected interactively with the TV monitor by looking at the menu shown on the TV monitor.

Subtitles:

These are the printed lines appearing at the bottom of the screen which translate or transcribe the dialogue. They are recorded on DVD discs.

Time Number:

This indicates the play time which has elapsed from the start of a disc or a title. It can be used to find a specific scene quickly. (It may not work with some discs.)

Title Number:

These numbers are recorded on DVD discs. When a disc contains two or more movies, these movies are numbered as title 1, title 2, etc.

Track Number:

These numbers are assigned to the tracks which are recorded on video CDs and audio CDs. They enable specific tracks to be located quickly.

Video CD (VCD): This contains recordings of pictures and sound whose quality is on a par with that of videotape. This player also supports video CDs with playback control (version 2.0).



Specifications

Signal System	NTSC/PAL
Video output	Output connector: Phono/21-pin Euro-SCART Output level: 1 Vp-p (75Ω)
S video output	Y output level: 1 Vp-p (75Ω) C output level: 0.30 Vp-p (75Ω) Output connector: S connector Y output level: 1 Vp-p (75Ω)
Component colour output	$P_B(C_B)$ output level: 0.525 Vp-p (75Ω)/75% colour $P_R(C_R)$ output level: 0.525 Vp-p (75Ω)/75% colour Output connector: Phono
Audio output	5.1ch output: Front L/R, surround L/R, centre and subwoofer 5ch output: Front L/R, surround L/R and center Output connector: Phono/21-pin Euro-SCART Output level: 2 Vrms (1 kHz, 0 dB)
Digital audio I/F	Optical digital output: Optical connector
Audio output	Coaxial digital output: Phono
Headphone output	Output connector: Standard jack
Video signal horizontal resolution	480 lines (DVD) 60 dB (DVD)
S/N ratio	For DVD linear PCM playback: 4 Hz to 22 kHz (48 kHz sampling) 4 Hz to 44 kHz (96 kHz sampling) CD playback: 4 Hz to 20 kHz (EIAJ) (MPEG Audio 1/2)
S/N ratio	CD: 105 dB, 1 kHz (EIAJ) DVD linear PCM: 94 dB (EIAJ)
Dynamic range	CD: 94 dB (EIAJ) CD: 0.005% or less (EIAJ)
Total harmonic distortion ratio	5°C to 40°C
Operating temperature	-20°C to 55°C
Storage temperature	
Power supply	220 V to 240 V AC, 50/60 Hz
Power consumption	16 W
Dimensions	430 mm × 351 mm × 97 mm (W × D × H) (including attachments)
Weight	3.8 kg

Specifications are subject to change without notice.

Weight and dimensions are approximate.

Digital Output

- The digital output format (optical or coaxial) used in this DVD player is linear PCM audio sampling at 44.1 kHz or 48 kHz. Linear PCM sound for DVD video discs sampled at 96 kHz cannot be output digitally. Check the disc jacket for information on the audio sampling used.



Before Calling Service

The following conditions do not always denote trouble. Therefore, perform the checks described below before calling for service. If the problem cannot be corrected by the use of this guide, remove the mains plugs from the wall socket, and contact the dealer or supplier from whom the unit was purchased in order to obtain service. Where this is not possible please visit our web-site www.sharp.co.uk/support. Customers without Internet access may telephone 0990 274277 during office hour.

Certain replacement parts and accessories may be obtained from our main parts distributor, who can be contacted on the following numbers:

WILLOW VALE ELECTRONICS LTD. :
0121 766 5414

In the unlikely event of this equipment requiring repair during the guarantee period, you will need to provide proof of the date of purchase to the repairing company. Please keep your invoice or receipt, which is supplied at the time of purchase.

The following problems do not always denote a broken DVD player.

Perform the checks listed below before calling service.

Problem	Suggested Solution
• No power	<ul style="list-style-type: none">• Is the power lead connected properly?• Is the power lead firmly plugged into the power outlet?• One of the safety mechanisms may be operating. In this event, unplug the player from the power outlet briefly and then plug it in again.
• The player is switched on but does not operate.	<ul style="list-style-type: none">• Have you loaded a disc?• Is the disc unplayable? (See pages 5 – 8.)• Is there condensation in the player? (See page 4.)
• The playback image does not appear.	<ul style="list-style-type: none">• Are the video and audio leads connected correctly? (See pages 10, 13 – 15.)• Is the disc scratched? (See pages 7 and 57.)• Is the disc dirty? (See pages 7 and 57.)• Is the disc loaded upside down?• Is the input selector on the TV set to "VIDEO" or "AV"?• Is the audio equipment switched on and are all the components connected properly? (Refer to the manuals for your audio equipment.)
• The remote control does not work.	<ul style="list-style-type: none">• Are the batteries loaded correctly?• Are the batteries flat?• Is the signal emitter on the remote control pointing at the player?• Is the remote control too far from the player, or is there any obstacle between the remote control and the player?
• There is no sound when you connect the player to your digital audio equipment. • The audio volume is too low when you connect the player to a TV or to stereo (2ch) audio equipment.	<ul style="list-style-type: none">• In SET UP, is the SPEAKER setting set to "2ch/DIGITAL"?
• The sound is not Dolby Digital (5ch or 5.1ch).	<ul style="list-style-type: none">• Is the disc you are playing recorded in Dolby Digital?
Analogue connection	<ul style="list-style-type: none">• In SET UP, is the speaker output set to "5ch" or "5.1ch"? (See page 20.)
Digital connection	<ul style="list-style-type: none">• Did you use the AUDIO button on the remote control to select Dolby Digital sound? (See page 49.)
• The image and sound are garbled.	<ul style="list-style-type: none">• Is the disc scratched? (See pages 7 and 57.)• Are vibrations from the speakers affecting the player?
• A function is disabled.	<ul style="list-style-type: none">• Certain functions are prohibited on some DVD discs.• Refer to the information in the disc jacket for details.
• When the player is connected to an amplifier with a 5ch or 5.1ch input connector, the volume of the Dolby Surround sound is lower than that of the Dolby Digital (5ch or 5.1ch) sound. Adjust the volume on the amplifier.	

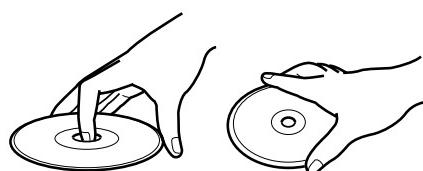
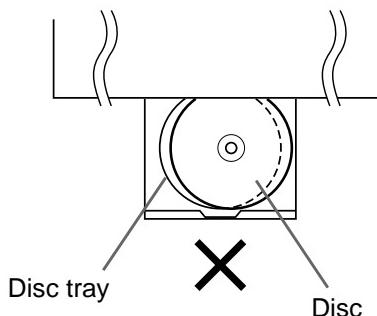
This unit is equipped with a microprocessor. Its performance could be adversely affected by external electrical noise or interference. If this should happen, unplug the DVD player and plug it in again after a few minutes.



Disc Handling and Maintenance

Handling Precautions

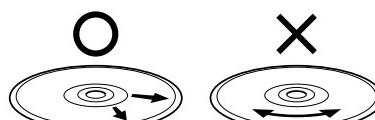
- Hold the disc by the edges so the surface will not be soiled with fingerprints. (A)
Fingerprints, dirt and scratches can cause skipping and distortion.
- Do not write on the label side with a ball-point pen or other writing utensils.
- Do not use record cleaning sprays, benzine, thinner, static electricity prevention liquids or any other solvent.
- Be careful not to drop or bend the disc.
- Do not install more than 1 disc on the disc tray.
- Do not try to close the disc tray when the disc is not installed properly. (B)
- Be sure to store the disc in its exclusive case when not in use. Then store upright.
- Do not stick paper or adhesive labels to the disc.

A**B**

If the Surface is Soiled (C)

Wipe gently with a soft, damp (water only) cloth.
When wiping discs, always move the cloth from the centre hole toward the outer edge.
(If you wipe the discs using a circular motion, circular scratches are likely to occur, which will cause noise.)

If the playing surface of a disc is soiled or scratched, the player may decide that the disc is incompatible and eject the disc tray, or it may fail to play the disc correctly. Wipe any soiling off the playing surface with a soft cloth.

C

If the Disc is Brought from a Cold to a Warm Environment, Moisture may form on the Disc

Wipe this moisture off with a soft, dry, lint-free cloth before using the disc.

Improper Disc Storage

You can damage discs if you store them in the following places:

- Areas exposed to direct sunlight
- Humid or dusty areas
- Areas directly exposed to a heat outlet or heating appliance

Maintenance

- Be sure to turn the unit off and disconnect the AC power lead before maintaining the unit.
- Wipe this unit with a dry soft cloth.
If the surfaces are extremely dirty, wipe clean with a cloth which has been dipped in a weak soap-and-water solution and wrung out thoroughly and then wipe again with a dry cloth.
- Never use alcohol, benzine, thinner, cleaning fluid or other chemicals. And do not use compressed air to remove dust.

Memo

Memo

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